Morgan Stanley | RESEARCH

UPDATE

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Global Interest Rate Strategist

The Hawks Went 2 for 4

Of the 4 major central bank meetings in the past 3 weeks, the BoE and Fed were notably hawkish. Yields dropped to local lows around the ECB meeting, and may have risen to local highs after the Fed, with the US and UK yields up the most. We remain neutral on duration, supported by our BMIs.

Duration and Curves

In the US, we still like tactical UST 2s30s flatteners, and add EDZ7/EDZ8 and EDZ7/EDZ9 flatteners. In the UK, we still like Mar-18 vs. Mar-19 short sterling steepeners, as either the MPC will not deliver on the hikes expected over the next year, or the market will shift to expecting more rate hikes. In Japan, we expect the 40y JGB auction to go smoothly on short-covering by dealers and demand from life insurers. We stick with 20y outright longs and 10s20s flatteners.

Sovereigns

In the US, we update our 2018 and 2019 UST supply forecasts and note that while net coupon supply will increase compared to 2017, most of the increase is due to lower redemptions in 2018. In DV01 terms, the increase in net supply from 2017 to 2018 is only 6%. In Europe, the S&P upgrade of Portugal's rating led to significant spread tightening. We highlight the risk of a similar move in Spain's spreads after the S&P's rating review on Friday.

Inflation

We move neutral on TIPS breakevens, even as our iBMI signal turned positive. We see a weak underlying inflation trend, hawkish Fed, and tensions around North Korea as reasons not to go long yet. We attempt to solve the 'mystery' for Fed Chair Yellen by using her inflation decomposition framework. In Japan, we preview the JGBi auction. We find current BEI valuations attractive.

Money Markets

In the Euro area, The ECB and ESMA have announced a working group to identify a risk-free O/N rate as an alternative to Euribor and Eonia. This indicates the possibility of a Euribor/EONIA replacement by 2021.

Derivatives

In the US, we suggest a conditional 2s30s bear flattener with positive pickup and a 3-month cap ladder that pays out 3.3x the premium if the Fed hikes in December. Both structures support our macro view for a December hike and flatter yield curves. In the UK, we no longer suggest being long vol based on the lack of realized and the pickup in investor selling activity.

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Duration and Curves

Global summary

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Our Bond Market Indicators, BMI(10), remain neutral on duration across all G7 markets. The vol-adjusted carry factor turned less bearish across markets, given the curve steepening over the week. Momentum across markets is mixed, as are the signals from the relationships between rates and FX markets. There is more uniformity, however, in what business cycle indicators suggest about bond markets. Except in Canada, business cycle surprises have suggested bond market weakness lies ahead. The only actionable signal we agree with from our BMIs comes from the BMI(2) model. In the euro area, we still like paying 1y1y EONIA.

In the US, we still like tactical UST 2s30s flatteners, and add EDZ7/EDZ8 and EDZ7/EDZ9 flatteners. In the UK, we still like Mar-18 vs. Mar-19 short sterling steepeners, as either the MPC will not deliver on the hikes expected over the next year, or the market will shift to expecting more rate hikes going forward. In Japan, we expect the 40y JGB auction to go smoothly on short-covering by dealers and demand from life insurers. We stick with 20y outright longs and 10s20s flatteners ahead of the fiscal half-year end.

Exhibit 1: Morgan Stanley Bond Market Indicators - BMI(10)

	Vol Adj. Carry	Momentum	Equity Markets	Business Cycle	FX/Rates	Average	Overall
UST	-2.2 (-2.4)	6.0 (9.4)	-3.3 (-2.1)	-5.5 (-5.3)	2.8 (3.8)	-0.4 (0.7)	**0.0 (0.0)**
DBR	4.2 (3.6)	1.7 (4.7)	-3.3 (-2.8)	-4.2 (-1.7)	-5.6 (-3.7)	-1.4 (0.0)	**0.0 (0.0)**
UKT	3.7 (2.7)	-7.1 (7.8)	0.5 (0.9)	-5.2 (-5.2)	1.7 (4.3)	-1.3 (2.1)	**0.0 (0.0)**
JGB	-3.8 (-3.2)	5.0 (7.9)	-3.9 (-1.9)	-4.0 (-4.0)	0.6 (-1.4)	-1.2 (-0.5)	**0.0 (0.0)**
ACGB	8.1 (7.9)	-4.9 (-2.7)	0.8 (-1.5)	-0.7 (-2.7)	8.1 (4.3)	2.3 (1.1)	**0.0 (0.0)**
NZGB	6.7 (6.5)	-1.3 (2.6)	-0.2 (-1.6)	-4.5 (-7.2)	-9.3 (-7.4)	-1.7 (-1.4)	**0.0 (0.0)**
CAN	-6.3 (-7.1)	-9.1 (-7.5)	-3.5 (-1.3)	9.6 (9.6)	4.8 (4.8)	-0.9 (-0.3)	**0.0 (0.0)**

Source: Morgan Stanley Research

Exhibit 2: Morgan Stanley Bond Market Indicators - BMI(2)

	Vol Adj. Carry	Momentum	Equity Markets	Business Cycle	FX/Rates	Average	Overall
UST	3.1 (-0.5)	3.6 (9.9)	-3.3 (-2.1)	-5.5 (-5.3)	1.6 (0.5)	-0.1 (0.5)	**0.0 (0.0)**
DBR	-7.5 (-8.3)	7.1 (7.2)	-3.3 (-2.8)	-4.2 (-1.7)	-5.9 (-6.5)	-2.7 (-2.4)	**-2.7 (0.0)**
UKT	6.8 (5.5)	-9.0 (5.6)	0.5 (0.9)	-5.2 (-5.2)	0.6 (4.3)	-1.2 (2.2)	**0.0 (0.0)**
JGB	-9.1 (-7.8)	7.3 (8.0)	-3.9 (-1.9)	-4.0 (-4.0)	1.2 (1.3)	-1.7 (-0.9)	**-1.7 (0.0)**
ACGB	9.1 (8.3)	-5.8 (-8.4)	0.8 (-1.5)	-0.7 (-2.7)	4.3 (1.1)	1.6 (-0.6)	**0.0 (0.0)**
NZGB	5.9 (4.7)	3.1 (5.4)	-0.2 (-1.6)	-4.5 (-7.2)	-7.5 (-5.5)	-0.6 (-0.8)	**0.0 (0.0)**
CAN	4.0 (2.9)	-9.6 (-9.1)	-3.5 (-1.3)	9.6 (9.6)	5.1 (5.9)	1.1 (1.6)	**0.0 (0.0)**

Source: Morgan Stanley Research
Note: Positive # = long duration; Negative # = short duration, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10, Overall signal set to zero if abs(Signal)<=1.5 and cross-market restriction is not satisfied.

Exhibit 3: Summary of G4 strategic interest rate views through 4Q17

4Q17	US	Euro area	Japan	UK
Monetary Policy	**Policy rate:** Dec-17 hike, four hikes in 2018. Balance sheet: Unwind announced in Sep-17 and started in Oct-17.	**QE:** ECB tapering announced in Oct-17, starting from Jan-18 and ending in mid-2018. Policy rate: The first 15bp depo rate hike to -0.25% in Sep-18.	**Long-term target:** Jan-Mar 2018 adjustment to the long-term interest rate target. Policy rate: First hike in the short-term policy rate in Jan-Mar 2019.	**Policy rate:** Risks to continued monetary policy stance tilted to hawkish in the near term because of above-target inflation and to dovish in the longer term on Brexit uncertainty.
Duration	**10y UST at 2.45%** Decreasing growth and economic data expectations together with a global demand for yield keeping a lid on the 10y despite the projected Fed hiking cycle.	**10y Bund at 0.60%** Yields edging higher on ECB extraordinary policy measure unwind and continued tight German funding markets because of QE-induced scarcity.	**10y JGB at 0.08%** Continued monetary policy to keep the 10y rangebound.	**10y Gilt at 1.00%** Political risks keeping domestic demand and growth subdued in the near term, balancing a MPC on hold and possibilities of fiscal expansion.
Curve	**2s10s at 0.95%** Hiking cycle bumping the front end to a flat FF-2y slope, more so than the increase in 10y yields, resulting in a bear flattening curve move.	**2s10s at 1.20%** Gradual policy normalization will maintain the curve slope, but measures to ease funding market scarcity tilt risks to steepening.	**2s10s at 0.26%** Steepening bias as our Economists are forecasting higher inflation and a BoJ preparing for policy tightening in 2018.	**2s10s at 0.90%** Scenarios of weaker or stronger economic performance affecting the long end would be accompanied by relevant MPC policy, keeping the curve slope around current levels.
Inflation	**Lower breakevens** Weaker realized inflation from structural and idiosyncratic factors and tighter Fed policy to keep inflation expectations low.	**Inflation curve bull flattening** Medium-term gradual inflationary recovery leading to a bull flattening of the inflation term structure.	**Risk-reward in breakevens** Risk-reward in JGBi in an environment where markets are not pricing in our Economists' forecasted wage-driven inflation boost.	**Inflation curve bear steepening** An accommodative MPC allowing for continued strong, but decreasing, realized inflation, resulting in a bear steepening of the inflation term structure.
Spreads	**Long belly swap spreads** Increased floater issuance reduces the pressure on belly spreads. Deregulation propositions reducing the cost of balance sheet allows spreads to converge to fundamental fair value.	**BTP-Bund spread at 190bp** Mild widening in 2H17 triggered by an autumn start to ECB renormalization and Italy election uncertainty.	**USD/JPY xccy basis remaining tight,** but the risk of widening in 3Q global USD funding environment remain favorable, thereby less widening pressure in near term. However, short-end basis could widen in 3Q because of resumed T-bill issuance, Fed balance sheet unwind and Japanese investor foreign bond demand**.**	-
Volatility	**Neutral Gamma, bullish Vega** Subdued realized vol is incentivizing vol selling strategies, which is keeping gamma offered, whereas vega should be supported by less Formosa callable issuance**.**	**Tactical short in Gamma, bullish Vega** Realized volatility likely to stay low for the rest of the summer, whereas vega should be supported by continued strength in economic data and ECB tapering.	**JGB ASW flattening, lack of vol** JGB ASW flattening to remain until the BoJ shows a clear stance on "exit strategy"; vol to remain subdued in the current monetary policy environment.	**Buy 3m6m 10y calendar spread** We recommend to take advantage of the current flat term structure of volatility to express a bullish view on 10y tails, which looks cheap on different metrics.

Source: Morgan Stanley Research

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It's not easy when you don't know what's going on

Reading through Chair Yellen's press conference Q&A transcript was frustrating. We published our hot-take on the FOMC meeting after the event, but did not include details from the press conference Q&A (see FOMC Reaction: Disconnecting the Dots from Inflation). We were surprised by Yellen's admission that the shortfall in inflation this year was "a mystery":

> *This year, the shortfall of inflation from 2 percent, when none of those factors is operative, is more of a mystery. And I will not say that the committee clearly understands what the causes are of that now.*

Despite not understanding the "mystery" of low inflation - something we don't think is really a mystery at all (see What's Eating Away at Inflation?) - the Fed clearly is on a mission to tighten monetary policy further. The main rationale seems to be, as Yellen suggested in her remarks, "Monetary policy also operates with a lag." What about the lagged effects on monetary policy tightening already delivered on the labor market? The Fed doesn't seemed concerned about how their policy tightening may negatively impact the labor market in the future.

We also found Yellen's assurances about responding to the data unconvincing.

> *We will look at incoming data on inflation and on other economic variables including the labor market, and deciding what we should actually do, going forward, and if it proves contrary to our expectations, that this shortfall is persistent, it will be necessary to adjust monetary policy to address that.*

Inflation data has already proven contrary to the Fed's expectations, and yet the Fed did not adjust monetary policy to address it. Why? Because the labor market remained firm and financial conditions - now a third mandate apparently - remained loose. Simply put, we are not convinced that the Fed would adjust monetary policy from its dot-plot-implied course if another shortfall in inflation were to occur into year-end, especially if financial conditions remained easy.

Yellen's choice of words in certain parts of her Q&A also tipped the Fed's hand with respect to monetary policy (**our emphasis**).

> *I can't say I can easily point to a sufficient set of factors that explain this year, why inflation has been this low. I've mentioned a few idiosyncratic things, but, frankly, the low inflation is more broad-based than just idiosyncratic things.* ***The fact that inflation is unusually low this year does not mean that that's going to continue on.***

The fact that inflation is unusually low this year also does not mean that it can't be even more unusually low next year. Her language gives away the Fed's bias with respect to inflation. Higher rates of inflation are more easily accepted and acknowledged than lower rates of inflation. The implicit confirmation bias is surprising to say the least.

And we find it inexplicable that, despite not being able to "point to a sufficient set of factors that explain [low inflation] this year", the Fed is going to monitor whether those factors are persistent.

> *Now we've had several months of data that have meaningfully pulled that down, and what we need to do is figure out whether or not the factors that have lowered inflation are likely to prove persistent, or they're likely to prove transitory. And that's what we're going to try to be determining on the basis of incoming data.*
>
> *...if we determined our view changed, and instead of thinking that the factors holding inflation down were transitory, we came to the view that they would be persistent, it would require an alteration in monetary policy to move inflation back up to 2 percent, and we would be committed to making that adjustment.*

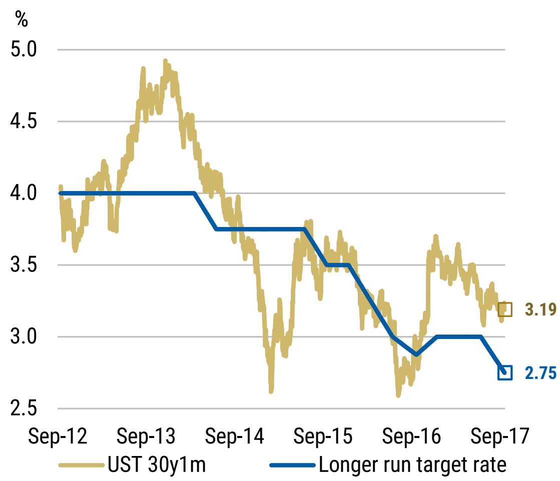
How does the Fed intend to monitor factors to which it cannot point? Yellen admitted the Fed could not identify "a sufficient set of factors", yet it intends to monitor them to see whether they are persistent. Given the Fed's history of labeling any factor that weighs on inflation as transitory, while not paying the same attention to factors that have temporarily boosted inflation, we could easily see a scenario where, once the Fed identifies a sufficient set of factors, it describes them as "transitory".

This is why we like curve flatteners, and have not liked owning inflation protection
The Fed tipped its hand. Even though it can't identify "a sufficient set of factors" that explain why inflation has disappointed this year, it signaled its intent to continue tightening policy. When a central bank tightens policy with inflation moving further below its target, why do investors need to worry about duration risk? Why do investors need to own inflation protection?

In our view, investors neither have to worry about real term premiums rising nor inflation risk premiums rising today. Investors should find long-end forward nominal rates attractive, now that the Fed's median longer-run rate has fallen (see Exhibit 4). As a result, we continue to suggest investors adopt UST 2s30s flatteners using a tactical approach. The Fed's actions of removing policy accommodation while inflation is moving away from its 2 percent target will make it more difficult for the Fed to achieve its 2 percent target, because that behavior weighs on inflation expectations.

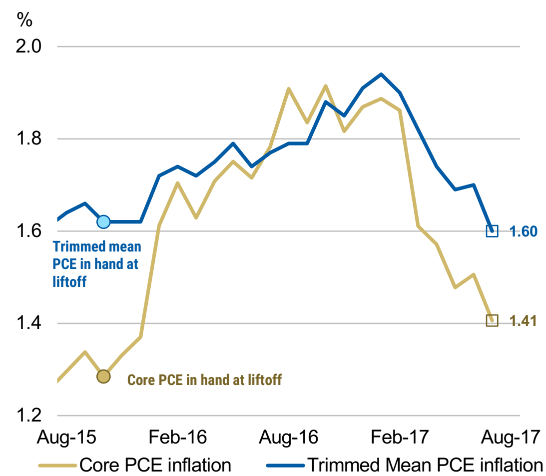
Imagine you lived on Mars. Every 2 years, you travel to Earth to briefly assess US monetary policy. Your last visit was December 2015. At that time, you saw that the Fed raised rates for the first time in almost a decade with core PCE inflation at 1.28% Y/Y and trimmed-mean PCE inflation at 1.62% (see Exhibit 5).

Exhibit 4: UST 30y1m forward yield vs. the FOMC median longer run projected policy rate



Source: Morgan Stanley Research, BEA, FRB Dallas

Exhibit 5: Core PCE inflation and trimmed-mean PCE inflation since liftoff



Source: Morgan Stanley Research, BEA, FRB Dallas

Fast forward to December 2017. Assume the Fed will have hiked its target rate range to 1.25-1.50% at the December 2017 FOMC meeting (matching Morgan Stanley's forecast for Fed policy). That hike would represent its 4th hike since liftoff and the 5th hike in the cycle. Then you check inflation. Core PCE inflation is at the Morgan Stanley forecast of 1.3% Y/Y (data for October, released in late November). You conclude the Fed must have made the right decisions to keep tightening policy gradually since the last time you visited, to maintain inflation at its target of 1.3%. The problem with this story, of course, is that the Fed's inflation target is 2.0%, not 1.3%.

The Fed's hawkishness provided an opportunity to enter ED flatteners again

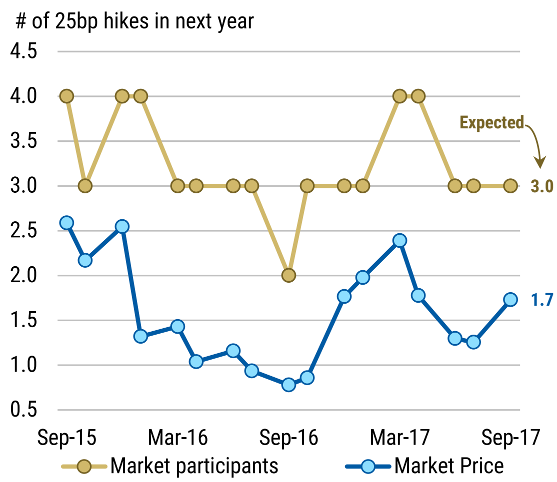
We suggested a UST 2s30s flattener ahead of the FOMC meeting and reiterated the trade afterward. But we recognize that, with flatteners - especially 2s30s, the negative carry is painful if held for a strategic horizon. As a result, in our US interest rate derivatives section, we propose a conditional 2s30s bear-flattener in which the vol pick-up alleviates the negative carry.

Before the FOMC meeting, we favored UST 2s5s30s 50:50 butterfly for the strategic long-belly position. However, given the median longer run dot fell again, we favor the 30y point on the curve now. So, we're want to express our strategic long-belly on the curve position in a different way: Eurodollar curve flatteners. We think the market-implied pace of rate hikes has increased too much in the month of September. The EDZ7/EDZ9 curve has steepened 20bp so far in September, and EDZ7/EDZ8 steepened 16bp.

With EDZ7/EDZ8 at 0.34%, investors may believe that only pricing in just over 1 rate hike next year is not enough, given that over half of investors polled by the New York Fed believe the Fed will deliver at least 3 hikes in the coming 12 months. But we know that investor expectations and market pricing don't have to align perfectly. Enter the concept of term premium, or risk premium. As we show in Exhibit 6, for the past 2 years, market pricing of Fed policy has not aligned with investor expectations.

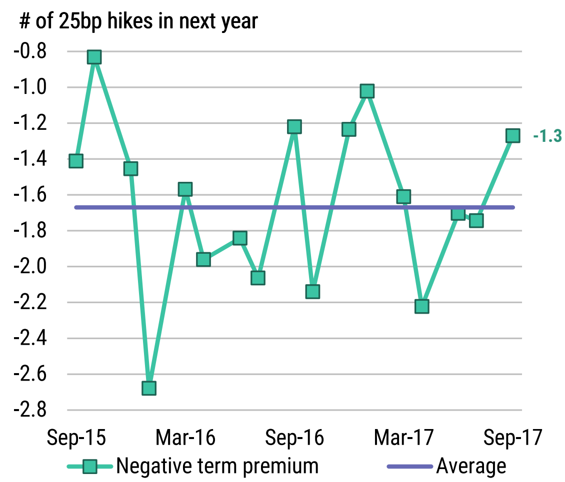
Exhibit 7 shows the historical difference between investor expectations and market pricing. On average, the market has traded with a negative term premium worth ~1.75 x 25bp rate hikes. After the hawkish FOMC meeting, the amount of negative term premium only amounts to ~1.25 x 25bp rate hikes. Through this lens, the pricing of the pace of rate hikes looks slightly stretched, even though it still doesn't align with the median market participant's expectation.

Exhibit 6: New York Fed survey of market participants vs. market price: # of rate hikes in the year ahead



Source: Morgan Stanley Research, FRB New York

Exhibit 7: Difference between NY Fed survey of market participants and market price – negative term premium



Source: Morgan Stanley Research, FRB New York

Much like our 2s30s Treasury curve flattener, the problem with expressing the view that the market-implied pace of rate hikes will come down is the rolldown. An EDZ7/EDZ8 flattener will roll against you 8bp over 3 months, assuming the Fed doesn't hike in December. An EDZ7/EDZ9 flattener will roll against you about 12bp over 3 months, assuming the Fed doesn't hike in December. These are not palatable amounts of negative rolldown if our view was the Fed would not hike rates in December.

However, our view is that the Fed will hike rates in December, so we expect 3m LIBOR to set between 1.55-1.60%, which means that EDZ7, currently priced at 98.50 or 1.50%, will not roll against us if the Fed hikes rates as we expect. This makes us feel less badly about suggesting the flattener from an expected rolldown perspective.

Trade idea: Maintain tactical UST 2s30s flatteners
Trade idea: Enter EDZ7/EDZ8 flatteners at 0.35%
Trade idea: Enter EDZ7/EDZ9 flatteners at 0.525%

One risk to the Eurodollar curve flatteners is that August core PCE inflation surprises to the upside on Friday, September 29. An upside surprise in August PCE inflation would likely drive investors to prepare for another upside surprise in September CPI inflation on October 13, 2017. A stronger-than-expected nonfarm payroll report on October 6, 2017 could also cause these curves to steepen, though we see this as less likely, given the hurricane effect obscuring the true message from the report.

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Two and done?

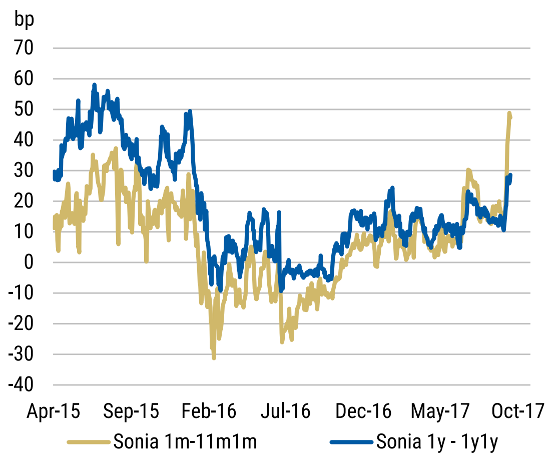
Following this month's MPC meeting, and even more so the hawkish speech give by the uber-dove Gertjan Vlieghe, the market has moved quickly over the last two weeks to price in rate hikes. A 25bp rate hike at the November MPC meeting is priced with 67% probability, which rises to 75% in December. In addition, the market is saying there is a ⅔rds chance of at least one further rate hike in 2018.

Given the MPC talk and resilient economic data (retail sales surprising to the upside this week, a further decline in the unemployment rate reported last week even if average weekly earnings failed to pick up), it makes sense for the market to price in rate hikes with such a high degree of certainty. It also makes sense for the market to price in more than one rate hike: a single rate hike would have negligible economic impact, and the MPC has communicated fairly explicitly that its economic forecasts require it to raise rates by more than the market forwards (of two weeks' ago) to achieve its inflation target at the end of its forecast horizon (subject to the amount of slack in the economy shrinking at the rate the BoE expects),

However, the rate profile the market is pricing is now an unusual one, with two rate hikes expected with a high degree of certainty, but little expected beyond then. The Sonia 1m-11m1m slope (i.e., the rate hikes which are priced for the next 12 months) is now significantly steeper than the 1y-1y1y slope (i.e., the rate hikes expected in the subsequent year - see Exhibit 8).

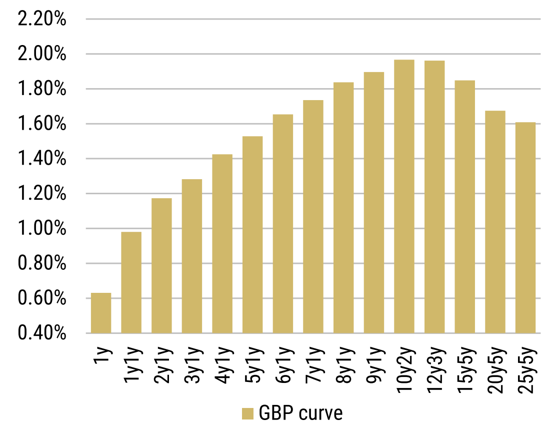
This is an unusual situation, as the chart shows, although it is consistent with the still-flat GBP forward rate term structure (see Exhibit 9). The UK term structure is unusually flat for a rates market where the central bank is expected to start raising rates. The terminal forward rate, in swaps, is not quite at 2%, which suggests that, if the MPC is expected to achieve its 2% inflation target in the medium term, it is not expected to raise real yields into positive territory.

Exhibit 8: Sonia front-end slopes



Source: Morgan Stanley Research, Bloomberg

Exhibit 9: GBP Libor forward rate term structure



Source: Morgan Stanley Research, Bloomberg.

Rate cycle interrupted?

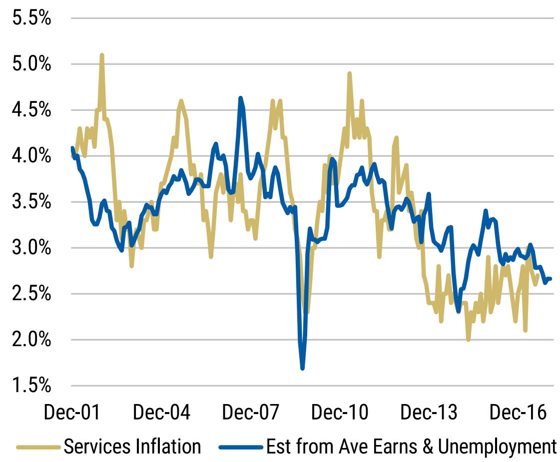
There is, of course, good reason to believe that the MPC will not get very far with its rating hiking cycle even if it manages to start it. The economic uncertainties surrounding Brexit will make the next few years difficult for the MPC to negotiate, as it will not only generate short-term economic uncertainty and political risk but also, potentially, have a significant impact on the UK's potential growth rate going forward, which in turn will affect the MPC's assessment of what an appropriate neutral policy stance ought to be.

While much of the focus around Brexit is on the short-term negative demand effects, which are usually seen to argue for looser monetary policy, the impact on the supply side may argue for tighter monetary policy in the medium term as reduced immigration and labour market flexibility mean increases in demand will more rapidly become inflationary. There is therefore a compelling argument as to why Brexit should cause medium term rate expectations to rise.

The current market pricing makes sense if one thinks the short-term, disruptive impact of Brexit will dominate the MPC's decision making. In particular, it implies that the MPC will embark on a rate hiking cycle due to rising domestic inflationary pressures but then is forced to stop after just a few hikes due to a negative exogenous shock. A further point to recognise is that no central bank has normalised policy quickly in the current cycle. The MPC's situation is different to the Fed's given inflation is significantly above its target level, but this is largely due to last year's FX depreciation. The domestically driven components of inflation, in particular services, remain unusually weak even given the tightening of the labour market (see Exhibit 10).

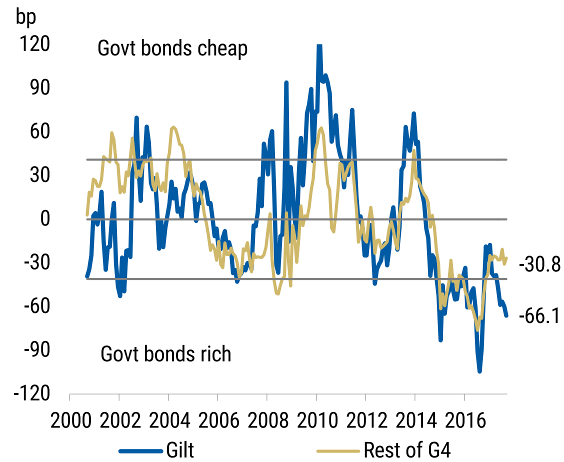
Relative to what is being priced in for the MPC over the next 2 years, 10y gilts remain remarkably rich, around 65bp below our estimate of fair value (although we note the same model for 10y USTs suggests a similar level of over-valuation - Exhibit 11). This model doesn't suggest that gilts have cheapened over the last two weeks, as the sell-off in 10y has, if anything, been less severe than one would have normally expected given the repricing at the front-end.

Exhibit 10: UK Services CPI & estimated from unemployment rate & ave. earnings



Source: Morgan Stanley Research, Bloomberg.

Exhibit 11: Residuals from 10y govt bond fair value models



Source: Morgan Stanley Research, Bloomberg.

How to position

The gilt BMI is increasingly leaning in a bearish direction, due to negative momentum and robust economic growth data, but we still find the UK duration call difficult given the economic challenges that lie ahead are significant, so that the safe haven bid for gilts remains strong. At the same time, valuations are already extremely demanding, so it would appear the market has already priced in the potential for an abortive rate hiking cycle and/or additional safe haven premium for gilts. But with the BMI still neutral, we continue to sit on our hands on the duration call.

At the front-end of the curve, though, we think the divergence between rate expectations for the next 12 months and the subsequent year are unlikely to persist. Either the MPC will not deliver on the hikes expected over the next year, or the market will shift to expecting more rate hikes going forward. We therefore continue to recommend front-end steepeners, but increasingly as a non-directional trade, ie., one we can see working either if the MPC follows through on a hawkish path or if it is forced to backtrack.

The key risk to this trade is that the entire front-end of the curve flattens in a scenario where all rate hikes are priced out, or the MPC is expected to hike but at a slower pace.

Trade idea: Long Mar-18 vs. Mar-19 short sterling at 27bp

Japan

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JGB markets have stayed firm

JGB yields had been facing upward pressure as global markets shifted back into 'risk on' mode, but the super-long sector has firmed up as the September 30 half-year turn approaches. This week's FOMC meeting saw few members lower their 'dot plot' projections for the federal funds rate through 2018 despite a lowering of inflation forecasts, confirming that the Fed continues to place greater emphasis on monetary conditions than on prevailing inflation trends.

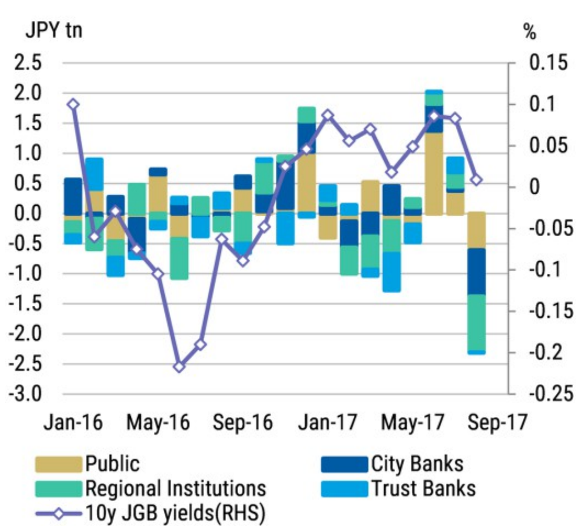
USTs sold off in the wake of the outcome that was somewhat less dovish than had been anticipated, but support around the 2.3% level for the 10y yield proved quite strong. JGBs had traded very stable as well.

Domestic investors keen to buy on dips

JSDA trading flow data for August showed domestic investors as a whole selling Japanese bonds, suggesting that profits were taken by reducing exposure temporarily as the summer rally continued. This was particularly evident in the long-term sector, with positions cut back as the 10y JGB yield threatened to drop back into negative territory (see Exhibit 12).

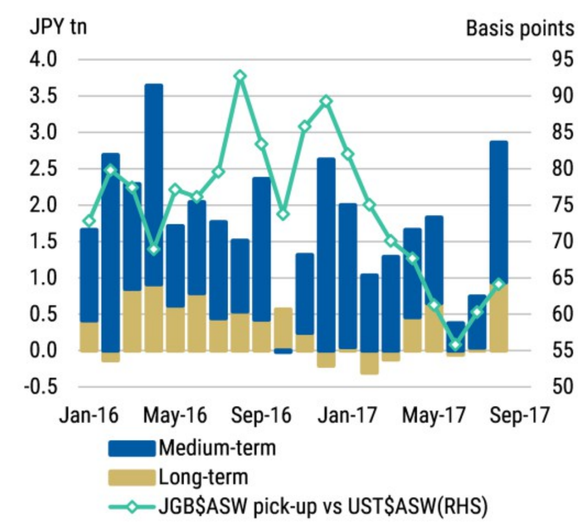
We expect that many (lightly positioned) domestic investors will be keen to buy on price dips in the final third of September, with JGB redemption proceeds needing to be reinvested, risk appetites improving and yields facing upward pressure amid the 'risk on' sentiment. Such demand is likely to be particularly strong in those sectors that still offer positive yields.

Exhibit 12: Net purchases of long-term JGBs by major domestic investors



Source: JSDA, Morgan Stanley Research

Exhibit 13: Net purchases of JGBs by foreign investors



Source: JSDA, Morgan Stanley Research

Demand from foreigners likely to remain intact

Surplus cash appears to have flowed into Japanese TDBs last month amid concerns that US T-bills would be in increasingly short supply as the federal debt ceiling 'drop dead date' drew closer in August.

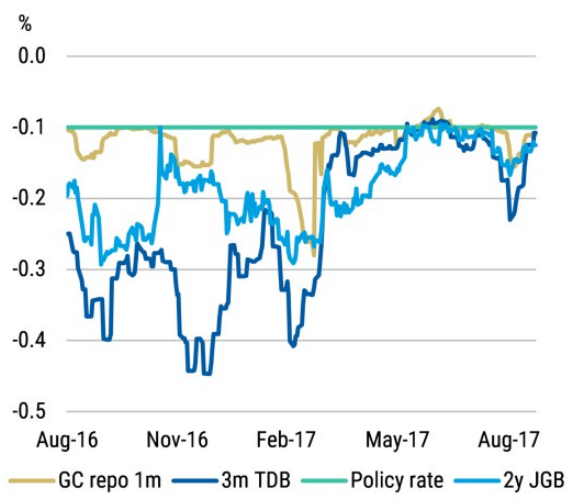
Moreover, as we discussed in Time to Shrink a Balance Sheet, USD/JPY basis swap spreads faced widening pressure as USD borrowing was front-loaded in anticipation of funding becoming scarcer once the debt ceiling problem is resolved and the US Treasury looks to build up its cash balance by hiking T-bill issuance. This widening served to improve the attractiveness of JGBs to USD-funded investors, thereby catalyzing foreign demand out as far as the long-term sector (see Exhibit 13).

Short-end rates are now back near the BoJ's marginal (Tier 3) policy rate of -0.1%, suggesting that such demand might have decreased (see Exhibit 14). However, we see a non-negligible risk of short-end rates facing downward pressure on renewed foreign demand.

As we discussed in Fiscal Policy - Life in the Slow Lane, we expect the US Treasury to increase T-bill issuance by just $50 billion during the period for which the federal borrowing limit is suspended. Hence, continued supply/demand tightness in the T-bill market will likely cause a portion of surplus cash to be channeled into short-dated JGBs.

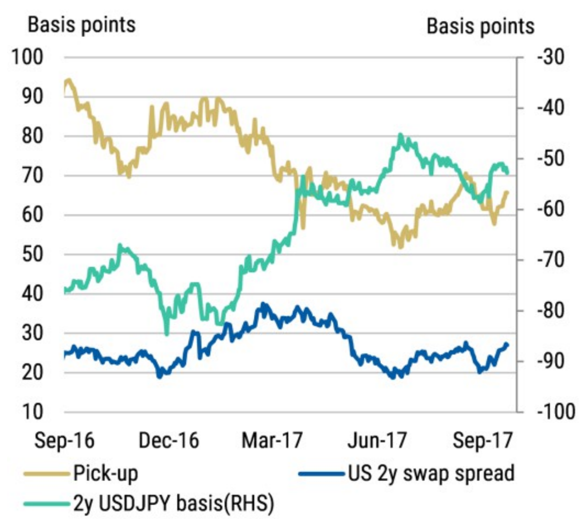
Short-end US swap spreads have widened and USDJPY basis spreads have tightened back as a consequence of debt ceiling suspension and the Fed having signaled its intention to proceed with rate hikes despite sluggish inflation, thereby boosting USD-denominated JGB yields relative to UST yields (see Exhibit 15).

Exhibit 14: Short-term JGB yields



Source: Morgan Stanley Research

Exhibit 15: 2y JGB$ASW vs. 2y UST ASW, US swap spread and 2y USDJPY basis



Source: Morgan Stanley Research

We thus expect the short end of the JGB curve to at least hold steady for the time being. CTA still appear to keep their massive long positions. With an average price of around 150.70 having been paid for the December contract, current positioning is likely to feel quite comfortable.

40y JGB auction preview

We expect the auction to go smoothly on short-covering by dealers and demand from life insurers. Lifers made only limited purchases of super-long JGBs in August, but are likely to channel more funds into the super-long sector this month – irrespective of price levels – due to both ALM-related requirements ahead of the 1H close and the need to reinvest the proceeds of JGB redemptions.

Short-covering needs among dealers are also likely to be quite strong, given that the BoJ already owns almost 50% of JU10. Furthermore, supply/demand should be supported by the fact that the BoJ will conduct two more sets of >10y operations before the end of this month. **We still expect the JGB curve to exhibit a bull-flattening bias through end-September and are thus sticking with 20y outright long and 10s20s flattener positions ahead of the fiscal half-year.**

BoJ monetary policy meeting result

The only real point of note at this week's meeting was the dissenting vote cast by recently appointed 'reflationist' Goshi Kataoka, who according to a footnote to the BoJ statement said that "since there remained an excess supply capacity in capital stock and the labor market, monetary easing effects gained from the current yield curve were not enough for 2 percent inflation to be achieved around fiscal 2019".

Markets may have been taken a little aback, but we side with our economics team in characterizing this as a minority view (see BoJ Watch: Sep MPM Review). We therefore expect the BoJ to persist with its 'yield curve control' framework for at least the time being even as the underlying inflation rate continues to languish at around zero.

Sovereigns

United States

We update our 2018 and 2019 UST supply forecasts and note that while net coupon supply will increase compared to 2017, most of the increase is due to lower redemptions in 2018. In DV01 terms, the increase in net annual supply from 2017 to 2018 is only 6% despite the Fed's plan to start balance sheet normalization and the increased budget deficit.

We expect an increase in net T-bill issuance in 2018 and 2019 to address the supply/demand imbalance in the T-bill market. Increasing T-bill issuance in 2018 would still keep the weighted average maturity (WAM) of the US debt on an upward trajectory while increasing the share of T-bills in total debt from its multi-decade lows.

Euro area

Although the surprise S&P upgrade of Portugal's rating to BBB- last week will likely trigger only one index provider's inclusion of Portugal into the government bond index, spread tightening was still significant after the move. With another S&P rating review on Spain taking place on Friday, September 29, we highlight the risk of a similar move. This will enhance the supporting factor for sovereign spreads and may encourage issuers to continue to extend issuance maturity, hence we like holding the BTP 5s30s steepener.

Cross market summary

Our cross-market Bond Market Indicators (xBMIs) are largely neutral except favor ACGBs over UST and NZGBs. We still like receiving AUD 5y5y vs. USD 5y5y (see Trade Ideas).

Exhibit 16: Morgan Stanley Bond Market Indicators - xBMIs

	DBR/UKT	DBR/JGB	DBR/UST	UKT/JGB	UKT/UST	JGB/UST
Overall	**0.0 (0.0)**	**0.0 (0.0)**	**0.0 (0.0)**	**0.0 (2.5)**	**0.0 (0.0)**	**0.0 (0.0)**
Average xBMI	-3.0 (-3.0)	-0.6 (0.8)	-2.6 (-2.6)	0.6 (2.5)	2.1 (4.2)	-0.2 (-1.0)
Combined BMI differential	0.0 (-2.1)	0.0 (0.0)	0.0 (0.0)	0.0 (2.1)	0.0 (2.1)	0.0 (0.0)
FX/Rates	-6.1 (-3.9)	-1.2 (1.6)	-5.3 (-5.2)	1.1 (2.9)	4.3 (6.2)	-0.5 (-1.9)
	ACGB/NZGB	**ACGB/CAN**	**ACGB/UST**	**NZGB/CAN**	**NZGB/UST**	**CAN/UST**
Overall	**2.0 (0.0)**	**0.0 (0.0)**	**4.4 (0.0)**	**0.0 (0.0)**	**0.0 (0.0)**	**0.0 (0.0)**
Average xBMI	3.8 (1.9)	1.3 (-1.3)	4.4 (2.3)	-1.8 (-1.8)	1.7 (2.1)	2.3 (1.6)
Combined BMI differential	4.0 (0.0)	2.3 (0.0)	2.3 (0.0)	-1.7 (0.0)	-1.7 (0.0)	0.0 (0.0)
FX/Rates	3.7 (3.8)	0.3 (-2.5)	6.4 (4.7)	-1.9 (-3.6)	5.1 (4.2)	4.7 (3.1)

Source: Morgan Stanley Research
Note: Positive # = long cross market spreads; Negative # = short cross market spread, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -15 and +15, Signal is calculated as the average of Combined BMI differential and the FX component. Signal is set to zero if abs(Signal)<=2 and/or its has a sign different from the Combined BMI differential

United States - Updating issuance forecasts for 2018 and 2019

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What's the 2018 deficit increase?

Under our Policy Strategists' base case scenario, we would get progress on the personal and corporate tax reform fronts. However, they expect progress to be slow and the fiscal stimulus to be disappointing in magnitude relative to market expectations.

Our Economics team now expects the potential stimulus to translate to an 0.4% increase in budget deficit for CY2018 relative to CY2017. They assume about $100bn in tax cuts will be deficit-funded and will begin to impact the deficit as of July 2018. As a result, we expect about half of the deficit expansion associated with the tax cuts to be recorded in CY18 while the other half should be pushed into CY19.

In dollar terms, that translates to about $50bn in reduced personal income tax receipts in CY18 before accounting for regular growth in tax receipts. Combined with growth in overall outlays outweighing higher corporate tax receipts, that drives an increase of $95bn in the overall budget deficit in CY18.

This $95bn deficit increase adds to the $200bn needed to raise the cash balance in 2018 and $230bn needed to compensate for the Fed balance sheet normalization. This sums up to $525bn of increased funding needs in CY2018 relative to CY2017.

Part of that increased funding need would be met with a $182bn decrease in coupon UST redemptions in 2018 relative to 2017. This leaves $343bn to be funded through increased net T-bill issuance and increased coupon treasury auction sizes.

Exhibit 17 summarizes the breakdown detailed above and shows our expectations for how much of the residual funding needs would be met using T-bills vs coupon issuance.

Exhibit 18 repeats the same analysis for increased funding and issuance needs in 2019 relative to 2018.

Exhibit 17: 2018 increase in funding needs and issuance vs 2017

Increased financing needs		Sources of funding	
Deficit Increase	95	Lower Redemptions	182
Cash Balance Increase	200	Net T-bill issuance increase	247
Fed B/S impact vs 2017	230	More Coupons Auctioned	96
Total	**525**	**Total**	**525**

Source: Morgan Stanley Research

Exhibit 18: 2019 increase in funding needs and issuance vs 2018

Increased financing needs		Sources of funding	
More Redemptions	141	Deficit Decrease	11
Cash Balance Increase	0	Net T-bill issuance increase	155
Fed B/S impact vs 2018	25	More Coupons Auctioned	0
Total	**166**	**Total**	**166**

Source: Morgan Stanley Research

All about the DV01

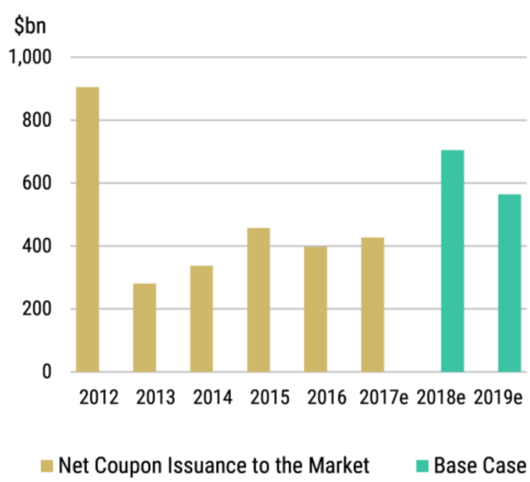
Exhibit 19 uses the data from the tables to show the trend in net coupon UST supply. At first glance, the increase in net supply from 2017 to 2018 looks large. However, most of that increase comes from a decrease in redemptions in 2018 by $182bn as the table in Exhibit 17 shows. Since maturing Treasuries have a duration close to zero, they should have limited impact on the amount of duration in the market.

Looking at the numbers in DV01 adjusted terms gives a more accurate picture of how much extra supply would hit the market in 2018 relative to 2017, which is what the Exhibit 20 does.

Note how the increase in DV01 adjusted terms from 2017 to 2018 or 2019 now looks more modest. It is a 6% increase; or $84bn worth of 10y notes' DV01. Even if we double the forecasted increase in 2018 budget deficit from $95bn to $190bn, the increase still looks modest in percentage terms as the "Bull Case" in the Exhibit shows.

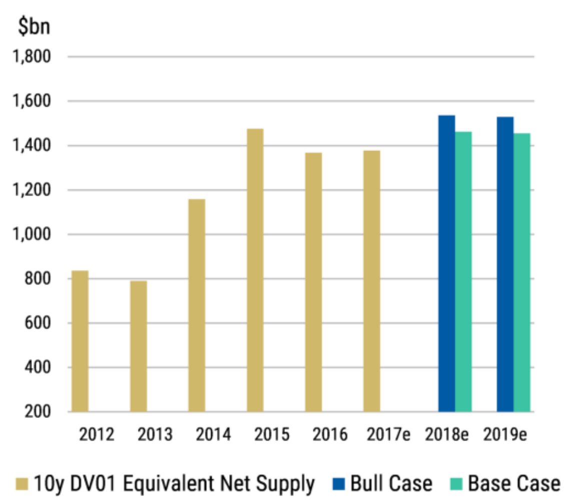
In short, we forecast the amount of UST duration that the market will have to absorb in 2018 and 2019 is not materially different from what was supplied in 2017.

Exhibit 19: Net nominal coupon issuance per year, net of Central Bank actions



Source: Morgan Stanley Issuance

Exhibit 20: 10y Equivalent Notional of net coupon supply



Source: Morgan Stanley Research

T-bill Supply/Demand Imbalance

So why are we projecting that most of the increased funding needs in 2018 will be met with increased T-bill issuance?

We are forecasting a net increase in T-bills outstanding of $247bn in 2018 relative to 2017. On the other hand we forecast coupon auction sizes to increase by $96bn in total over the 2018 ($2bn increase per auction for 2s and 3s and $1bn increase per auction for 5s, 7s, 10s, and 30s).

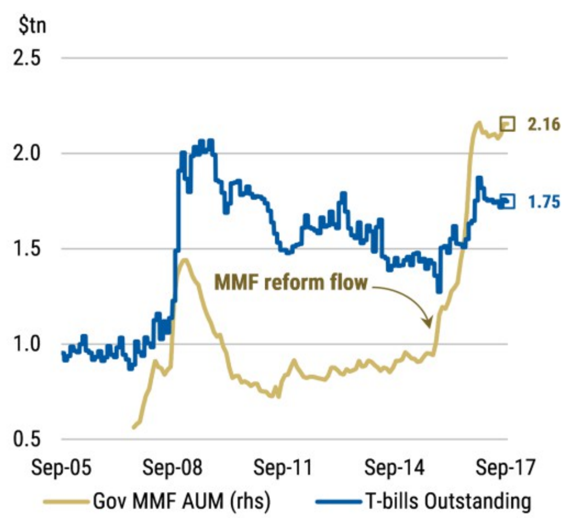
To be clear, if the deficit ends up being larger than our forecasted $95bn, that increase will probably be financed by more coupon issuance rather than simply increasing net T-bill supply. In other words, we see a ~$250bn increase in net T-bills outstanding as consistent with the TBAC's recommendations to the Treasury. The TBAC recommended an increase in issuance across all tenors, however, it also recommended gradually increasing the share of T-bills in the overall US debt.

The need to increase T-bills outstanding is driven by the supply/demand imbalance caused by MMF reform in 2016. The flow of over $1tn in AUM into government Money Market Funds that primarily invest in T-bills and repo backed by USTs meant that government MMF AUM is now more than the total size of the T-bill market (see Exhibit 21).

The spread between MMF AUM and total T-bills outstanding is currently at its widest. Exhibit 22 illustrates the implications of that large difference, which are:

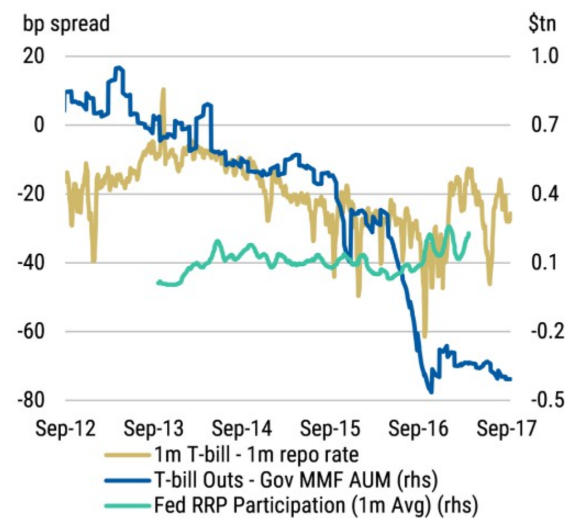
1. Participation in the Fed's Reverse Repo program doubled over the past year from around $100bn to over $200bn.
2. T-bill rates have been depressed relative to repo rates. Currently the yield on **1-month** T-bill is 6bp lower than the yield earned at the Fed's **overnight** repo facility.

Exhibit 21: T-bills outstanding vs government MMF AUM



Source: Crane Data's Money Fund Intelligence, Department of the Treasury, Morgan Stanley Research

Exhibit 22: T-bills outstanding net of government MMF AUM vs RRP participation and T-bill/Repo spread



Source: Morgan Stanley Research, FRBNY, Bloomberg

The Treasury and the TBAC are aware of that imbalance and have been targeting an increase in T-bill issuance since last year. However, the debt ceiling episodes meant that the Treasury's success with increasing T-bill issuance has been limited over the past year.

As Exhibit 24 shows, an increase in T-bill issuance in 2016 led to a short lived bounce in T-bills as a share of total debt before the Treasury was forced to cut issuance ahead of the March 15, 2017 debt ceiling deadline leading to a $60bn drop in T-bills outstanding in 2017 YTD.

The increase in T-bill issuance we are forecasting for 2018 is very similar to the net increase in issuance seen in 2016 and would resume the trend of increase in the share of T-bills in debt as the forecast line in Exhibit 24 shows. If all the funding needs that we forecast are met with increased coupon issuance, however, then the share of T-bills in the UST market will drop as the turquoise line on the chart shows.

But what about the WAM?

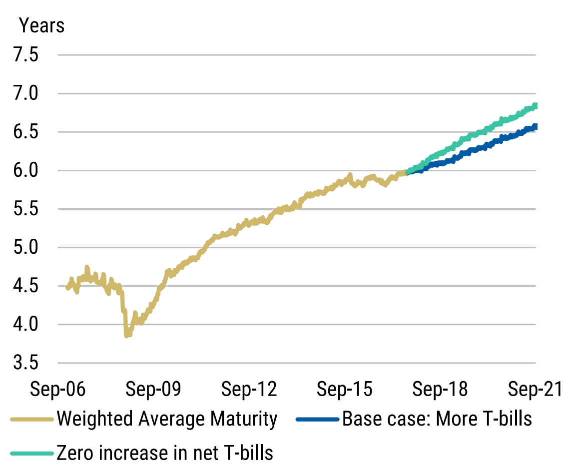
As part of its August 2017 report to the Secretary of the Treasury, the TBAC suggested that:

> Treasury should consider increasing auction sizes across all tenors while gradually increasing T-bills as a share of overall debt. Under this proposal, the weighted average maturity (WAM) of the debt would gradually increase. Several other scenarios were presented. For example, were Treasury to concentrate increases at the front end of the Treasury curve with a large jump in the T-bill share to 22% of outstanding, coupons would increase only modestly.

In the minutes of the August TBAC meeting, some members emphasized that "that the marginal benefits of extending WAM past the intermediate sector were very low." While the Treasury could still target an extension of its debt's WAM leading to more emphasis on coupon rather than T-bill issuance, we note that our forecast for issuance still increases the UST WAM at its current pace.

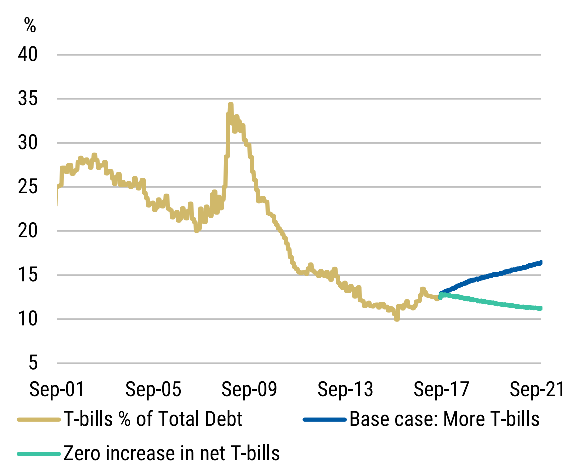
Exhibit 23 shows the WAM projection under two scenarios: in the base case, the Treasury meets the funding needs that we forecast by increasing net T-bills outstanding by $247bn in 2018 and $155bn in 2019 and each year thereafter, while increasing coupon issuance to meet additional needs. In the alternative case, only increased coupon issuance is used to meet increased funding needs.

Exhibit 23: Forecasted weighted average maturity of outstanding UST marketable debt



Source: Morgan Stanley Research

Exhibit 24: T-bills outstanding as a % of total marketable debt



Source: Morgan Stanley Research, Bloomberg

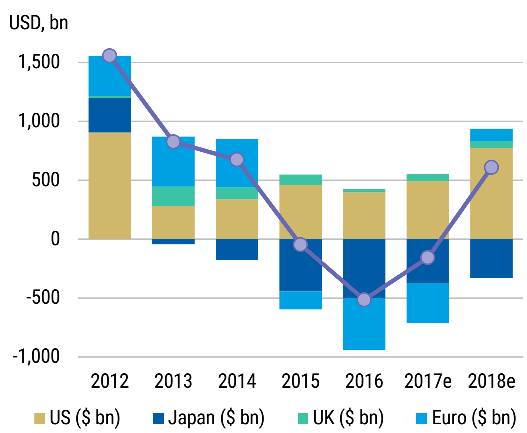
As the chart shows, the projection for the WAM increases in both cases, but the scenario with increased T-bill issuance has the added benefit of amending the supply/demand imbalance in the T-bill market discussed above. Thus, we think it is the most likely choice for the Treasury.

Global Supply Forecast

Finally, Exhibit 25 and Exhibit 26 take a look at the bigger picture for net supply in G4 economies in nominal and DV01 neutral terms, respectively.

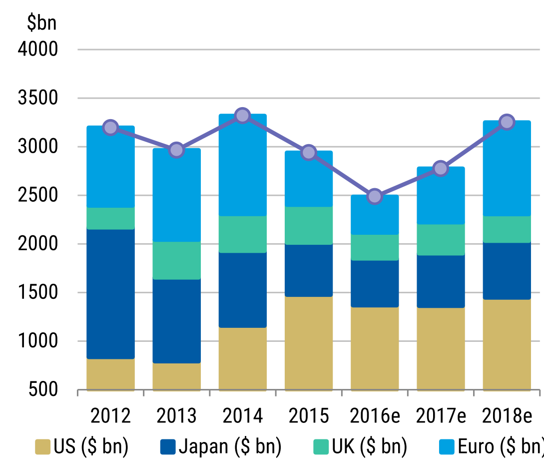
The increase from 2017 to 2018 issuance is around 17% in DV01 adjusted terms and mostly reflects our Economists' expectations for an ECB QE taper announcement in October 2017.

Exhibit 25: G4 net nominal coupon issuance per year, net of Central Bank actions



Source: Morgan Stanley Research

Exhibit 26: G4 10y DV01 equivalent net supply net of central bank actions



Source: Morgan Stanley Research

Euro area - A Spanish upgrade?

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In a surprise move last week, S&P upgraded Portugal's rating to BBB-, with stable outlook. Despite the upgrade being only likely to trigger one index provider's inclusion of Portugal into the government bond index while others would require at least another IG rating, spread tightening was still significant. With another S&P rating review on Spain taking place on Friday, September 29, we highlight the risk of a similar move, given that its outlook on Spain is already positive.

Portugal upgrade

Without an intermediate step of revising the outlook from 'stable' to 'positive', S&P went straight to upgrading Portugal's sovereign rating from BB+ by one notch to BBB-, making it investment grade (IG) again after it was downgraded to below IG in 2011 during the sovereign crisis (see Exhibit 27). Both Moody's and Fitch still have Portugal rated below IG, since their downgrade in 2011, which means that Portugal is still excluded from the other major government bond indices, given the index rating requirements (see Exhibit 28).

Exhibit 27: Rating profiles for Portugal, Spain and Italy and their next rating review in 2017

	Moody's		S&P		Fitch	
	Current Rating	Review	Current Rating	Review	Current Rating	Review
Portugal	Ba1 (Positive)		BBB- (Stable)		BB+ (Positive)	
Spain	Baa2 (Positive)	20-Oct	BBB+ (Positive)	29-Sep	BBB+ (Positive)	
Italy	Baa2 (Negative)	06-Oct	BBB- (Stable)	27-Oct	BBB (Stable)	20-Oct

Source: Rating agencies

Exhibit 28: Government bond index provider rating requirements

Index Name	Min Rating	Rating Rule (Exit Criteria)	Rebalancing Date
Barcap Global/Euro Aggregate Index	BBB- or higher	Middle rating of S&P/Moody's/Fitch	End of Month
Barcap Euro Treasury/Euro Govt Term Index	BBB- or higher	Middle rating of S&P/Moody's/Fitch	End of Month
Citi World Govt Index (WGBI)	BBB- or higher	Best of Moody's or S&P	End of Month
BoA ML Global Bond Index	BBB- or higher	Average of S&P/Moody's/Fitch	End of Month
Iboxx	BBB- or higher	Average of S&P/Moody's/Fitch	Enf of Month

Source: Index providers

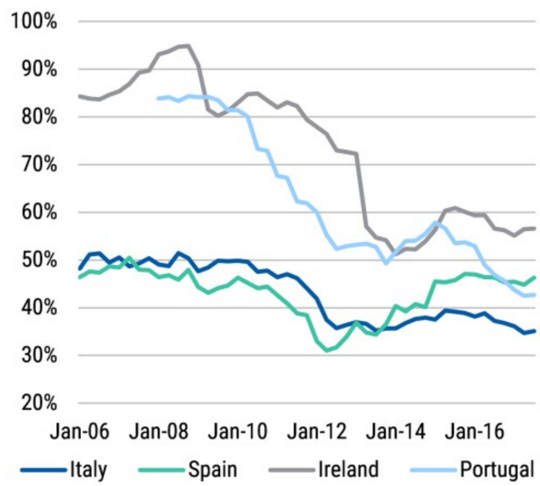
What happened in 2011

The exclusion of PGBs from major indices means that foreign real money investors who are usually index followers (either passive or active) would not be required to hold PGBs. Despite the rating downgrade and the index exclusion happening after the PGB-Bund spread was already trading at 1,000bp and that most foreign investors would have liquidated their PGB positions by then (see Exhibit 29), the PGB-Bund spread still made new highs following the index removal (see Exhibit 30).

What happens now?

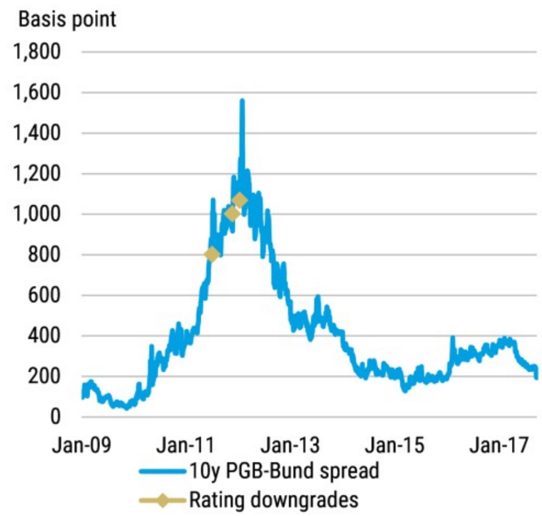
With rating agencies' move usually a lagging indicator for markets, PGB-Bund spreads have already tightened significantly since March this year. However, investor profiles have not yet shifted meaningfully,Exhibit 31 shows that domestic investors still represent over 50% of the PGB market, and this has been rising since the start of this year. The ECB data as of March 2017 in Exhibit 31 also show that non-eurozone foreign investment remains very small, i.e., €10 billion or less than 7% of the market.

Exhibit 29: Foreign investor holdings as % of outstanding government bond market



Source: Eurostat, Morgan Stanley Research

Exhibit 30: 10y PGB-Bund spread and rating downgrade dates to below IG



Source: Bloomberg, Morgan Stanley Research

Exhibit 31: Italy, Spain and Portugal total government debt investor base

EUR bn	Total General Govt Debt *	PSPP **	SMP	Total Eurozone holding **	of which: Insurance Pension	of which: Banks	of which: Other Financials	of which: Others	Non-Eurozone Holding
Italy	1,912	217	50	1,330	391	469	267	202	315
Spain	961	160	21	647	217	268	124	38	133
Portugal	153	26	10	108	22	48	14	24	10

Source: ECB, Eurostat, Morgan Stanley Research
*Total general government debt includes both central and regional government debt
**Convert from market value to nominal value using weighted average price of each sovereign as of the end of each period

If Moody's and Fitch follow suit with S&P in their rating reviews next year (see Exhibit 27) to upgrade towards IG, more major government bond indices will include PGBs in the indices, which is likely to boost non-eurozone investors' holdings further and be a supporting factor for the PGB-Bund spread in the medium term, in our view.

S&P rating review on Spain

Looking ahead, S&P will have its rating review for Spain on Friday, September 29, where it already has its outlook at 'positive' from its March 2017 review. The 'positive' outlook implies a one-third chance of a rating upgrade over a period of six months to two years. The criteria S&P laid out in March 2017 for an upgrade were:

- If strong economic performance continued;
- If the government succeeded in consolidating the public finances further;
- If the agency observed additional improvements in the monetary transmission mechanism, meaning how effectively the ECB's monetary policy influences financial conditions, based on interest rate spreads and overall credit conditions.

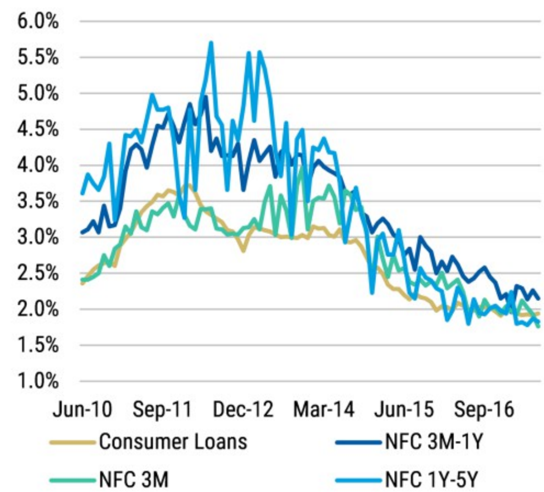
On the growth outlook, S&P had 2.5%Y in 2017 and 2.1%Y in 2018 in its March review. The current consensus on Bloomberg is at 3.0%Y and 2.5%Y, respectively (see Exhibit 32), suggesting that risk is to the upside. Similarly for public finances, S&P's March projection for the 2017 deficit was 3.3% and now the government target is running at 3.1%, which is the same as our forecast (see Exhibit 32). Meanwhile, the MFI (monetary financial institutions) lending rates to households and non-financial corporations have continued to fall, suggesting that the monetary policy transmission mechanism is working (see Exhibit 33).

Exhibit 32: S&P's March 2017 forecast for Spain vs. current

	S&P Mar-17 Review	Current Forecast (BBG or MS)
2017 GDP	2.50%	3%
2018 GDP	2.10%	2.50%
2017 Deficit	3.30%	3.10%

Source: S&P, Bloomberg, Morgan Stanley Research

Exhibit 33: Spain MFIs' new loan lending rates to consumers and non-financial corporates



Source: ECB, Morgan Stanley Research

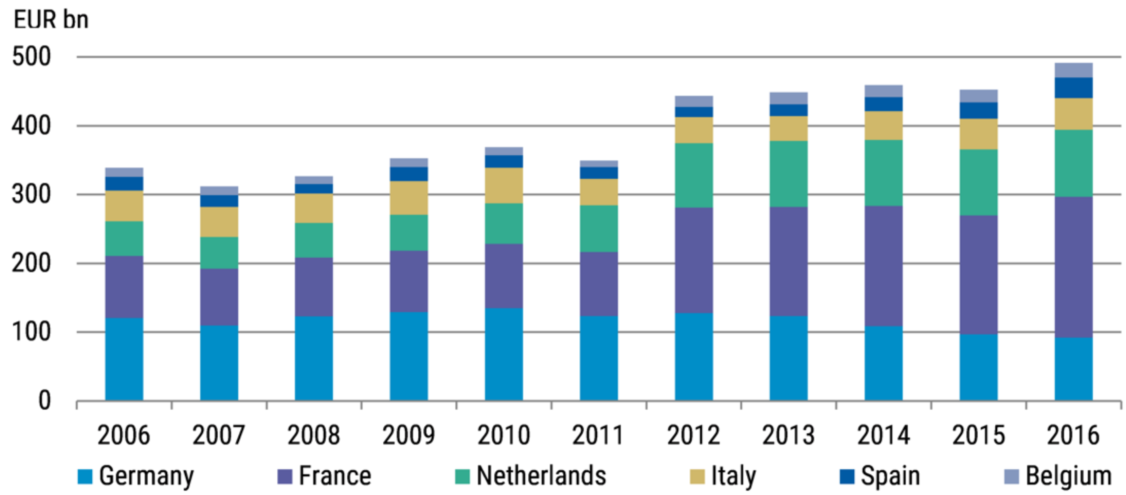
Last but not least, political risk; S&P did highlight uncertainty with regard to Catalonia. However, it does highlight that "Despite the strained relations, though, we anticipate that Catalonia will remain part of Spain", which is in line with our base case, and not likely to impose significant risk to its rating outlook, in our view.

Implications of a potential upgrade

With the factors outlined above, the risk towards an upgrade in this rating review is not slim, in our view. However, an upgrade for Spain will not have any material change for index inclusion, given that Spain is already IG rated and included in all government bond indices (see Exhibit 28). Especially given the strong outperformance of Spanish growth in the past few years, foreign investors have already returned to Spain more so than Italy, and non-eurozone investors already hold ~14% of the overall Spanish government debt (see Exhibit 29 and Exhibit 31).

Having said that, for more conservative real money investors an IG rating is usually not sufficient to meet their inclusion requirements, where an A- rating upgrade for Spain may still matter more than other index followers. For instance, Japanese holdings of Bonos and BTPs have been low over the past few years in the aftermath of European sovereign crisis, despite a significant increase in OAT holdings (see Exhibit 34). The potential for foreign investors to continue to increase their Bono holdings in a potential rating upgrade would not be a surprise to us.

Exhibit 34: Japanese investor holdings of EGBs



Source: Japan MoF, Morgan Stanley Research

How to position?

We still believe that with ECB policy renormalization path being delayed and Bund yields staying steady, there is a stable environment for sovereign spreads. More rating upgrades will also add to the support for peripheral spreads. This also means that sovereign issuers will likely try to take advantage of the stable spread environment to tap the issuance, especially with a skew towards lengthening the maturity. We therefore hold onto our BTP 5s30s steepener to position for long-end issuance skew and earning attractive carry and roll in a stable spread environment.

Exhibit 35: Morgan Stanley Euro Sovereign Bond Market Indicators (eBMI)

	Business Cycle Surprises	Momentum	Vol. Adj. Carry	Supply	Risky Assets	Overall
Periphery vs. Core	-4.5 (-4.2)	-0.1 (0.7)	10.0 (10.0)	-4.4 (7.7)	4.9 (4.1)	**1.2 (3.7)**
Semi-Core vs. Core	-4.1 (-5.3)	3.0 (-0.9)	7.1 (7.3)	8.3 (-6.0)	-6.2 (-5.2)	**1.6 (-2.0)**
Periphery vs. Semi-Core	-0.2 (0.6)	-1.5 (0.8)	1.4 (1.3)	-6.4 (6.9)	5.6 (4.7)	**-0.5 (5.7)**

Source: Morgan Stanley Research
Note: Positive # = long periphery or semi-core vs. core, long periphery vs. semi-core; Negative # = short periphery or semi-core vs. core, short periphery vs. semi-core; (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10.

Trade idea: Hold 5s30s BTP steepener at 258bp, with 11bp carry & roll/quarter

Trade idea: Buy RAGB 2117 vs. sell RAGB 2062 at 31bp

Inflation

United States

We move neutral on TIPS breakevens as our iBMIs signal turned positive, carry is turning positive too, and a discussion on tax reform brings the possibility of the market focusing on positives given the low expectations to start with. However, we see a weak underlying inflation trend, hawkish Fed and possibility of headlines on North Korea as reasons not to go long yet.

We look at Yellen's comments in her September FOMC press conference, ahead of her speech on Tuesday next week. Yellen's comments resonate with her inflation decomposition model suggesting why she thinks the inflation miss is a 'mystery'. However a tweak to that model shows how declining inflation expectations explain a big part of that mystery. We see other structural forces like technology, oversupply and a structural dollar bull market as the remaining contributors to the mystery of low inflation.

We take a look at the NY Fed's new Underlying Inflation gauge and explain why we do not think it will be a very useful addition to the many other Fed-sponsored measures of core inflation that already exist.

Japan

We update the recent development of JGB BEI. Although BEI has recovered quickly from the local bottom, we believe that the current BEI valuation still looks attractive to buy. We also preview the JGBi auction on October 5.

Global summary

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Our Inflation Bond Market Indicators (iBMIs) have turned positive on TIPS and UKTi breakevens while staying neutral on HICP swaps and JGBi breakevens. Oil prices, equities and momentum have all been positives for TIPS UKTis and HICP swaps. While the sterling strength has lowered oil price inflation in the UK, it is still a positive factor for the UKTi market. Exhibit 36 shows the BMI readings as of Thursday close, September 21.

Exhibit 36: Morgan Stanley Inflation Bond Market Indicators (iBMI)

	Crude Oil	Momentum	Equities	Value	Average	Overall
TIPS	3.3 (2.8)	3.4 (-0.2)	2.3 (1.5)	-0.6 (-0.8)	2.1 (0.0)	**2.1 (0.0)**
UKTi	1.8 (2.0)	7.6 (6.0)	0.3 (0.1)	-5.2 (-5.3)	1.1 (0.0)	**1.1 (0.0)**
HICPxT	2.9 (2.6)	4.3 (2.9)	2.0 (1.8)	-6.2 (-6.3)	0.0 (0.0)	**0.0 (0.0)**
JGBi	4.2 (2.7)	-6.8 (-7.7)	2.0 (1.1)	4.1 (4.4)	0.0 (0.0)	**0.0 (0.0)**

Source: Morgan Stanley Research
Note: Positive # = long inflation breakeven; Negative # = short inflation breakeven, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10, Overall signal set to zero if abs(Signal)<=1.0

Equities also contributed in a modestly positive way for inflation sentiment, as equity markets have been slowly but steadily moving higher, except in the UK. Momentum in general has been positive, as oil prices, upside surprises in realized inflation, and the possible hurricane effects on the US have combined to boost breakevens. Value on the other hand, continues to constrain the positivity of other factors as breakevens in US, UK and Europe look richer versus realized inflation trends in recent years.

In TIPS, we move to neutral, taking a cue from our iBMIs, which suggest a positive (i.e., long breakeven) stance. We see a weak inflation trend, a hawkish Fed and risks around North Korea as enough to dissuade us from going long in spite of iBMIs, positive carry, and discussion about tax reform. In the UK, we maintain our long front-end positions, alongside 10s30s breakeven curve steepeners. In Europe, we maintain 10s30s HICP flatteners as a constructive view on inflation. Finally, in Japan, we also stay constructive by being long JGBi breakevens.

United States - Trying to solve Yellen's 'mystery' on inflation

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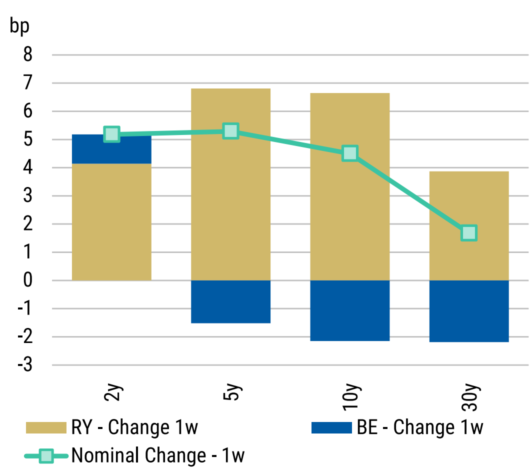
Breakeven recap - Turning neutral on breakevens

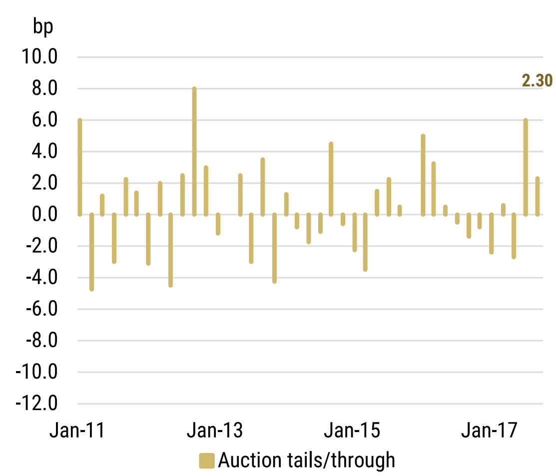
The Fed didn't help: Breakevens tightened over the week (see Exhibit 37) as the Fed consolidated the expectations for another hike in December, even as it lowered its inflation forecasts, making it clear that it places low importance on realized inflation trends. What's more, **even though Fed Chair Janet Yellen admitted that the reasons for lower inflation prints were a 'mystery', the Fed continues to believe (and react) as if the weakness in inflation is transitory - two inherently contradicting narratives** (see our post FOMC reaction).

Exhibit 37: Move in TIPS breakevens and real yields over the week



Source: Bloomberg, Morgan Stanley Research

Exhibit 38: TIPS auction tails and throughs over the last five years



Source: Morgan Stanley Research

The auction didn't help either: In other events for the TIPS market, the 10-year TIPS auction tailed by 2.3bp - making it the third consecutive tailing auction, and the second consecutive tailing 10-year TIPS auction following the remarkable 6bp tail in July (see Exhibit 38). While the auction dealer takedown was 27% - slightly lower than the 12-month average - we believe what matters is the price. Yes - more investors took down the TIPS auction than usual, but that needed a cheaper price. Everybody loves discounts.

Oil prices a minor support: Oil prices were also slightly higher over the week as an improved demand dynamic (high refinery runs, high utilization, high projected demand by the IEA) along with some improvement in the underlying supply (slowing down of Shale, improved OPEC compliance) has helped oil prices stay above $50/bbl on the WTI. In fact our energy sector analysts think oil prices could stay in the $48-$52 range in the near term.

iBMIs and carry turning positive, following the momentum in breakevens, helped by strong performances in oil and equity prices. A signal of +2.1 backed by three of the four component signals is indeed a decently strong suggestion to go long. Additionally, carry will turn significantly positive in the upcoming two months helped by the post-hurricane increase in gas prices (see Exhibit 40). However, we refrain from going long but tactically move to neutral for now - as we explain below.

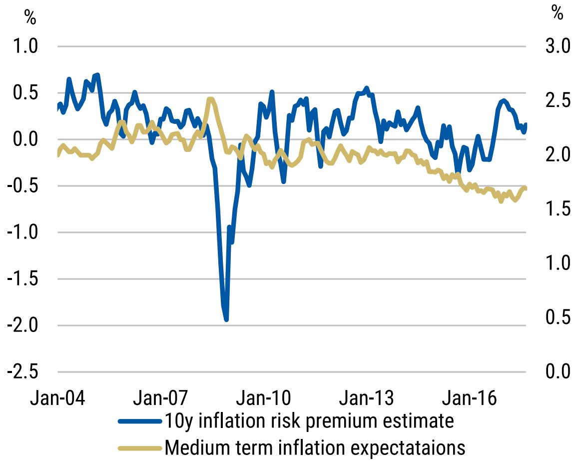
Tax announcement, PCE, and Yellen speech loom: The coming week has many events that could impact the breakeven market:

- **Tax announcement:** As our public policy strategists noted earlier this week, they are skeptical on bipastisanship but expect a slow progress towards tax reform in 2018, along with limited deficit expansion. We believe that any news of progress - especially given that it may not contain enough details - would likely be positive for breakevens. We believe expectations are subdued, and scope for downside surprises is low.

- **Yellen speech:** Fed Chair Yellen delivers a speech on 'Inflation, Uncertainty and Monetary Policy'. It is likely that her speech will go along the lines of ECB head Draghi's speech in Sintra and BoE governor Carney's speech earlier this week, suggesting the Fed wants to be preemptive about inflation in a world of rising r*, and tightening labor markets. While the speech could be seen as a negative for inflation risk premium, it may not do much to tighten breakevens coming not long after a hawkish September FOMC meeting.

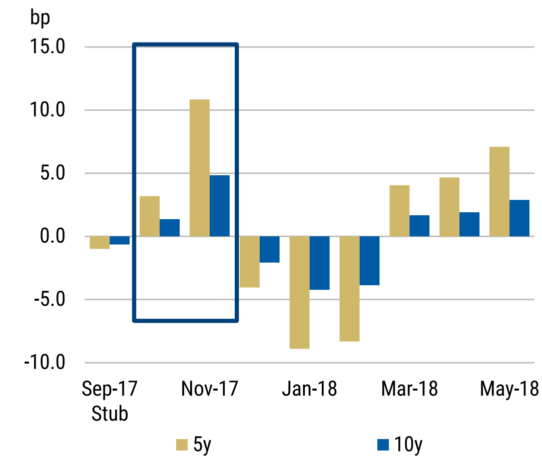
- **August Core PCE: We expect m/m core PCE to be at 0.16% and barely round down to 1.3% y/y.** However, even a slight miss in our estimate could help PCE round up to 1.4%, improving the optics for the inflation market. We do not see much reaction on the PCE print as is typical, given (1) CPI leads PCE and (2) TIPS are based of CPI.

Exhibit 39: Inflation risk premium and inflation expectations embedded in 10-year breakeven



Source: Bloomberg, Morgan Stanley Research

Exhibit 40: Monthly carry over the coming months in 5-year and 10-year breakevens



Source: Bloomberg, Morgan Stanley Research

Why not go long breakevens? As we turn tactically neutral, we maintain our medium-term view for lower breakevens. There are three main reasons we do not go long in spite of our iBMI signal as well as a possible skew on the event risks for the upcoming week.

1. First, the risk of North Korea tensions escalating is a meaningful one, given the strong rhetoric from both sides. An escalation of tensions in August helped breakevens tighten by 7bp on the 10-year sector.

2. Second, we are fundamentally bearish on the inflation trajectory. We believe structural forces on the supply side are hampering any progress from the Phillips curve. We identified (1) technology disruption, (2) oversupply, (3) overcapacity in China, (4) lower inflation expectations and (5) the structural dollar bull market as working against the only upside driver, the Phillips curve.

3. Third, we also believe that the Fed's framework on inflation will hurt breakevens (even more) in the medium term - both from an inflation expectations and inflation risk premium standpoint (see Exhibit 39). The Fed has an explicit 2% inflation target, which continues to be undermined as the Fed hikes amid low inflation and is unable to explain the 'mystery' behind recent weakness.

Trying to solve the inflation mystery for Yellen

Fed chair Yellen acknowledged that the recent inflation shortfall has not been all 'idiosyncratic' but is 'more of a mystery' in the absence of obvious reasons like oil prices or import prices. We believe that Yellen has implicitly referred to her inflation breakdown model that she introduced in her speech on inflation in 2015 - and about which we may hear more in her speech on Tuesday of next week. The model breaks down headline and core inflation per the equation below:

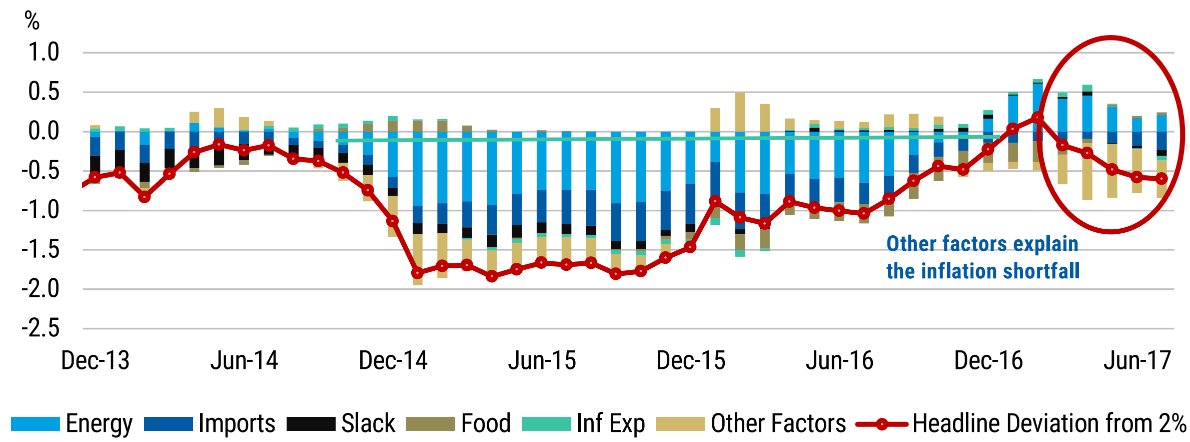
$PCE_H = \alpha_{Food} * RP_{Food} + \alpha_{Energy} * RP_{Energy} + PCE_C$

$PCE_C = 0.36 * PCE_{C\,(t-1)} + 0.23 * PCE_{C\,(t-2)} + 0.41 * PCE_{Expectation} - 0.08 * Slack + 0.57 * RP_{Core\ Imports}$

where, PCE_H = Headline PCE, PCE_C = Core PCE

The breakdown results in the chart in Exhibit 41, which suggests that indeed, true to Yellen's comment, the recent shortfall is not explained by energy or import prices as was the case in 2014-2015. In fact, the 'other factors' explain the decline, and other factors are, by definition, not specific, which is why we believe Yellen called them a 'mystery'.

Exhibit 41: Decomposition of shortfall in headline PCE inflation over recent months according to Yellen's model introduced in 2015

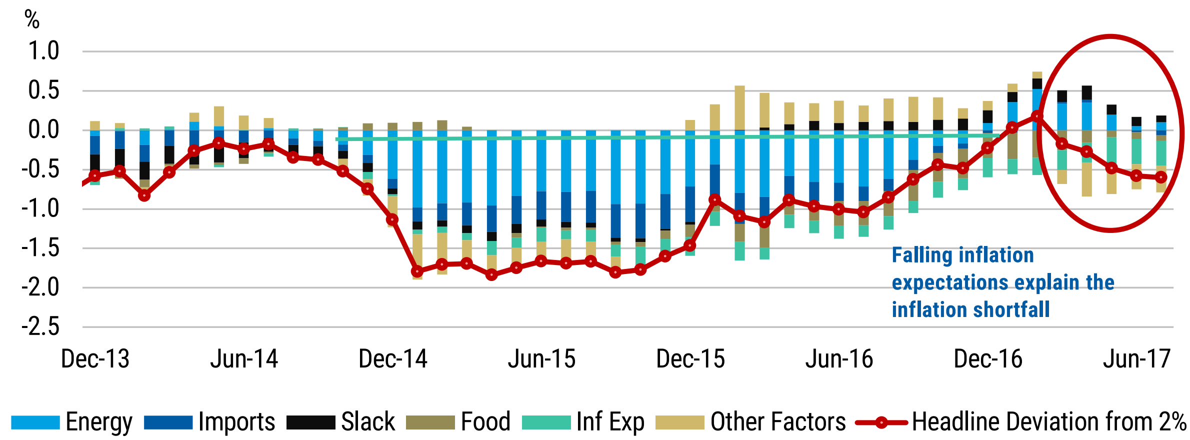


Source: Bloomberg, Morgan Stanley Research

It is true that some of the decline captured by 'other factors' does include the wireless drop in March CPI, but that is the only major idiosyncratic factor that we see affecting inflation. What else? **We tweaked Yellen's model to change the measure of inflation expectations she has used** - the survey of professional forecasters - and replaced it with the University of Michigan five-year forward five-year inflation expectations.

Exhibit 42 shows that **a large part of the decline that was earlier explained by other factors (the 'mystery') is now explained by falling inflation expectations.** Similarly, if we replace the measure of inflation expectations used in the model by 10-year forward 20-year TIPS breakevens, the conclusions are the same: inflation expectations explain a large part of the decline in realized inflation. Note that, in this tweaked version of the model, inflation expectations did not start weighing on realized inflation this year but have been weighing on it for a few years now.

Exhibit 42: Decomposition of shortfall in headline PCE inflation over recent months after tweaking Yellen's model by replacing survey of professional forecasters with University of Michigan 5y5y inflation measure

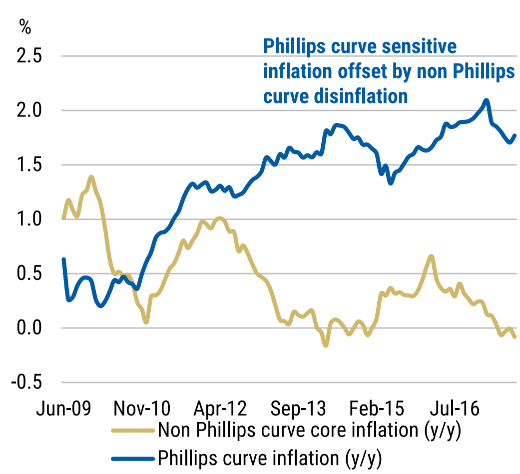


Source: Bloomberg, Morgan Stanley Research

As we see in Exhibit 42, there is still a sizeable contribution from 'other factors', and we believe these factors could explain the themes we discussed in our recent publication, What's eating away at inflation?: including technology disruption, oversupply, overcapacity in China, and the structural dollar bull market have been working against the Phillips curve.

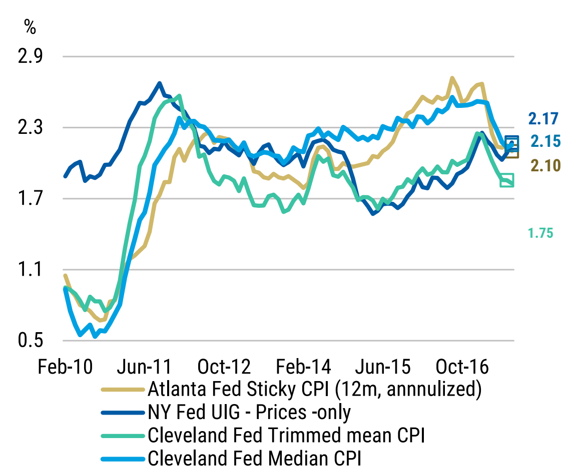
Exhibit 43 shows how core CPI inflation can be broken down into the Phillips curve-sensitive segments of inflation in the CPI basket and the non-Phillips curve-sensitive sectors. We can see that progress in the Phillips curve sectors in recent months has been offset by weakness in the non-Phillips curve sectors, a reflection of the five themes we discussed above. Note that even the Phillips curve components like shelter have been affected negatively by the excessive supply in rental markets.

Exhibit 43: Decomposition of core CPI into Phillips curve sensitive inflation vs. non -Phillips curve driven inflation



Source: Bloomberg, Morgan Stanley Research

Exhibit 44: Alternative measures of inflation competing with the Underlying Inflation Gauge



Source: Haver Morgan Stanley Research

The new Underlying Inflation Gauge - Our take

The New York Fed posted a blog Friday, in which it said it will now provide a monthly release of the Underlying Inflation Gauge (UIG) after the CPI at 2.30pm the same day. We see three reasons it may not be a very useful guide to economists and markets alike:

1. **Similarities to the Labor Market Conditions Index:** In 2014-2015, the Fed started talking about the Labor Market Conditions Index - a concept similar to the UIG, especially given that both indexes were designed to filter out the "noise" and provide a reading of underlying trends. Additionally, both indicators are based on extracting factors, in an attempt to capture the topmost singular drivers of inflation and labor markets. The LMCI eventually faded away once the intuition deviated from the results, highlighting the problem with any such gauge: it cannot explain all the moves all the time.

2. **Many Fed-driven alternative measures exist:** There are many regional Fed-driven inflation indicators that aim to extract core inflation, or the inflation trend, by filtering out the noise. Atlanta Fed, Cleveland Fed, Dallas Fed have already been publishing trimmed means, medians and sticky CPI measures, none of which have found widespread acceptance. In the last few months, when inflation was declining, all these measure fell with moves in core inflation (see Exhibit 44), and none of them were used as an explanation or for understanding inflation trends.

3. **Need for PCE instead of CPI:** The UIG will be released for CPI, while the Fed's preferred measure for inflation is the PCE. While it is understandable to have one for CPI given that it is released before PCE and provides an early read, there are times when CPI and PCE diverge and a similar measure for PCE could make the overall dataset more useful.

Japan - JGBi market update

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Background of recent breakeven pick-up

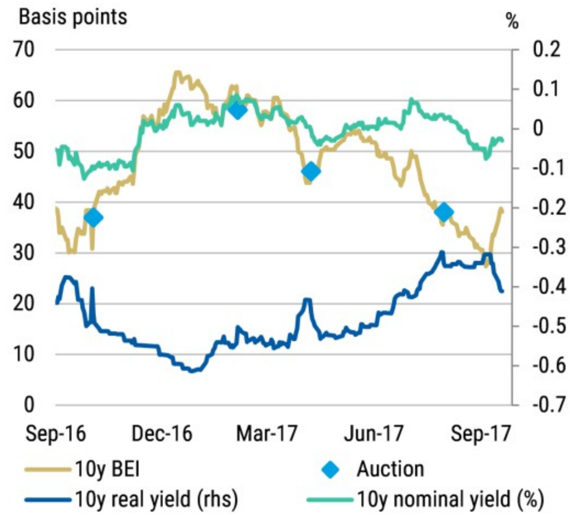
Breakeven inflation rates (BEIs) for Japanese inflation-indexed JGBs have rallied sharply over the past few days (albeit off quite depressed levels) despite the next auction being scheduled for October 5 (see Exhibit 45). We see at least three contributing factors:

(1) An improvement in supply/demand: Dealers had been weighed down with inventory due to there being only a roughly two-month gap between the August and October JGBi auctions, with secondary market demand limited even at sub-40bp BEIs amid 'risk off' sentiment fuelled by concerns over negative inflation carry, the North Korean situation, the US debt ceiling problem and the possibility of a federal government shutdown.

The net upshot appears to have been that dealers used BoJ operations and MoF buybacks to lighten their positions, with the newest linker (JBI22) accounting for over 95% of BoJ/MoF purchases since August (see Exhibit 46).

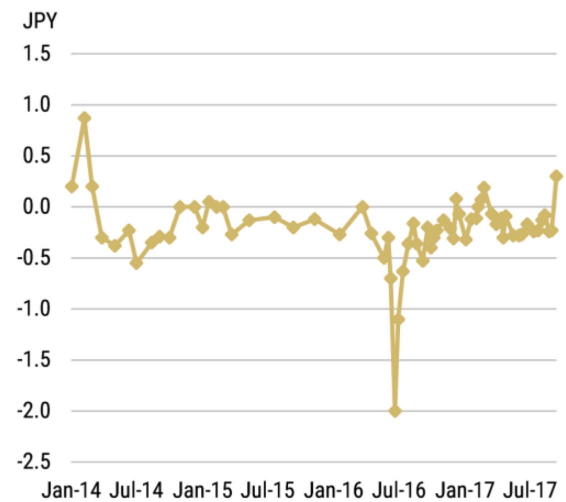
However, current positioning should now be a little more comfortable. The highest price for the September 19 BoJ operation came in ¥0.30 above the previous day's close, marking the strongest result since February 2014 (ahead of the April 2014 consumption tax hike from 5% to 8%). We thus believe that dealer inventories are now light enough to prevent more than limited cheapening of breakevens prior to the October 5 auction.

Exhibit 45: Recent BEI history



Source: Morgan Stanley Research

Exhibit 46: Recent MoF buyback and BoJ linker purchase result (maximum acceptable bid price)



Source: Japan Mof, BoJ, Morgan Stanley Research

(2) A change in risk sentiment: The mood in financial markets has turned more buoyant over the past couple of weeks due to a temporary easing of concerns over North Korea, less significant damage from Hurricane Irma than had originally been feared and a postponement of potential triggers for a US federal government shutdown.

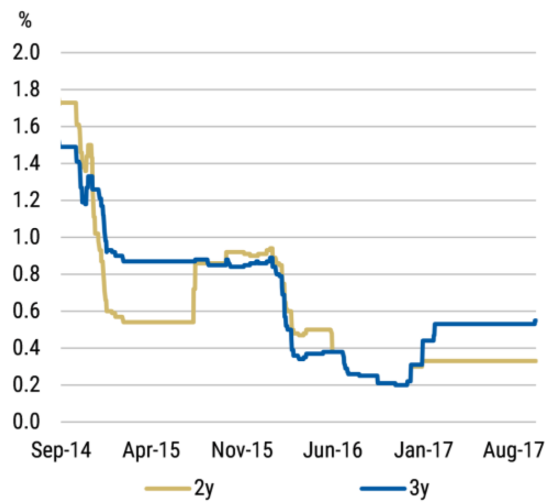
As discussed in Why We Differ on Japan, the main investors in JGB BEIs are hedge funds and other fund managers with relatively short horizons in mind, meaning that demand tends to be quite sensitive to temporary positives for CPI such as rising oil prices or yen depreciation. Our impression is thus that **the forward-looking inflation expectations formation mechanism has provided a short-term boost for breakevens.**

(3) A renewed focus on the planned October 2019 consumption tax hike: It is now being widely reported that Prime Minister Shinzo Abe is planning to dissolve the Lower House for an election on October 22. The need to avoid a "political vacuum" due to the North Korean situation has been cited as an (admittedly quite weak) justification for going to the polls at this juncture.

However, Abe has also pledged that the proceeds of the planned October 2019 consumption tax hike from 8% to 10% would be used to pay down the national debt, increase social security spending and put more than ¥1 trillion towards making education free of charge. It is thus starting to look more probable that the tax increase will go ahead as scheduled, which is likely to have been priced into breakevens to at least some degree.

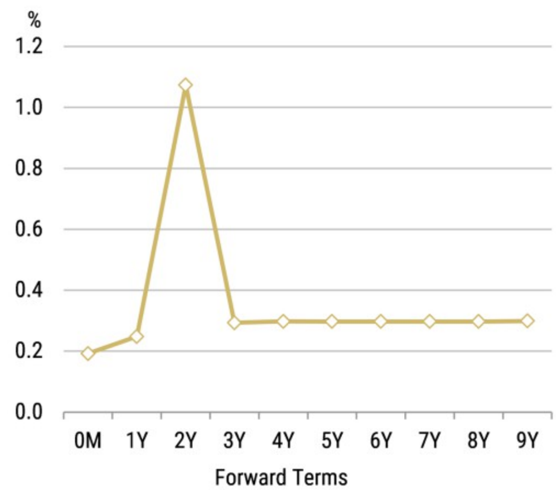
3y inflation swaps surged higher than 2y this January (reflecting a rise in CPI three months earlier; see Exhibit 47), and for this reason the forward curve already implied that the consumption tax hike is around 70% priced in (see Exhibit 48). However, we doubt if this pricing truly reflects the actual market, given that inflation swaps market are very illiquid. Moreover, we also doubt if this pricing can be applied to the JGBi market.

Exhibit 47: 2y and 3y zero-coupon inflation swap



Source: Morgan Stanley Research, Bloomberg

Exhibit 48: Implied forward 1y inflation swap



Source: Morgan Stanley Research

October 5 auction preview

We expect the October 5 reopening of JBI22 to go smoothly. As discussed above, dealers have already reduced their inventories to more comfortable levels, and foreigners should also be looking to buy against a backdrop of tighter supply/demand, improved risk sentiment and a renewed focus on the October 2019 consumption tax hike. **We thus advise against setting target buying prices too low.**

Below we consider the current attractiveness of JGBi breakevens from a number of perspectives:

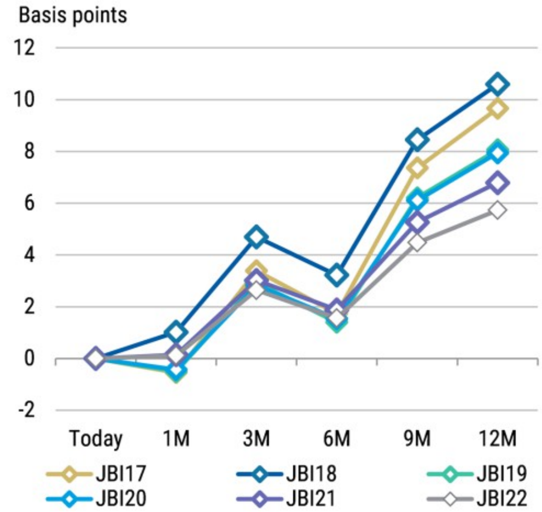
(1) Supply/demand: As discussed above, supply/demand already looks to have improved quite significantly. Moreover, no further offerings are scheduled before next February.

(2) Inflation carry: Our economists expect core CPI inflation to quicken markedly from August as labor market tightness starts to impact on prices, thereby pushing inflation carry well into positive territory (see Exhibit 49).

Tokyo data for August (released roughly a month ahead of the nationwide figures) showed significant improvements in both core CPI (all items less fresh foods) and the BoJ-favored measure of "underlying" inflation (all items less fresh foods and energy; see Exhibit 50), reflecting contributions from electricity and gas charges, clothing and footwear, and an increase in out-of-pocket medical treatment fees for the high-income elderly.

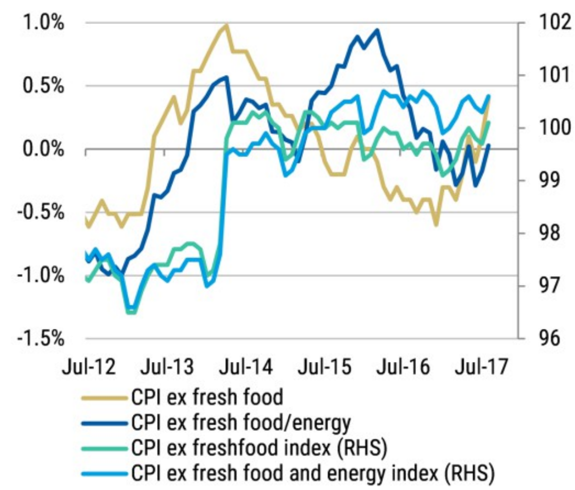
Our economists now expect CPI ex fresh food for August, due on September 29, to rise from 0.5% in July to 0.7% (see Snap Election and C-tax Hike).

Exhibit 49: Inflation carry based on our inflation outlook



Source: Morgan Stanley Research

Exhibit 50: Tokyo CPI ex fresh food and ex fresh food and energy



Source: Japan Ministry of Internal Affairs and Communications, Morgan Stanley Research

(3) Valuations: We have constructed a simple fair value model for JGBi breakevens with oil prices, the JPY trade-weighted index, past core CPI prints and price spreads for BoJ operations and MoF buybacks as explanatory variables, reflecting **our assumption that breakevens are determined by a combination of forward-looking expectations reflecting oil price and exchange rate movements, adaptive (backward-looking) expectations, and supply/demand factors.**

We find that past core CPI prints do not in fact have statistically significant explanatory power, and also that current breakeven levels are cheaper than appears commensurate with oil prices, the yen's trade-weighted exchange rate and the supply/demand balance (see Exhibit 51).

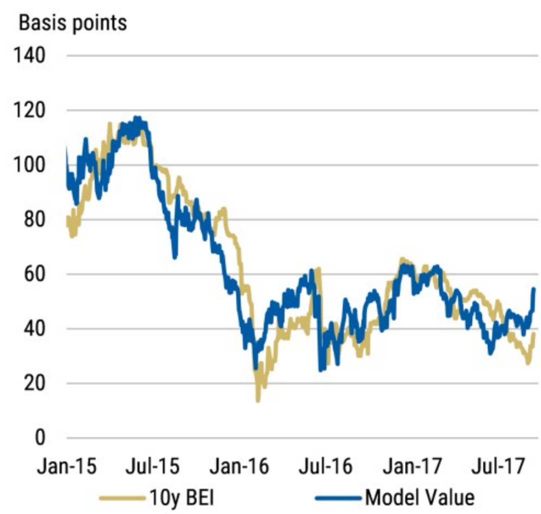
Importantly, our model makes no allowance whatsoever for the impact of an October 2019 consumption tax hike. If we were to add this in, then assuming 60% pass-through (based on past experience) would leave the BEI with a further 12bp in upside (2%*0.6/10 years). **In other words, breakevens could rise beyond 65bp if oil prices and USD/JPY were to remain near their current levels and the market were to fully price in an October 2019 consumption tax hike from 8% to 10%.**

Although not our main scenario, we also acknowledge the possibility of the US Congress enacting tax system reforms sooner than currently envisaged and/or the Abe administration compiling a massive supplementary budget in December with a view to boosting its approval ratings, in which case we would expect breakevens to receive yet further support via the forward-looking inflation expectations formation mechanism.

We also see very little prospect of sharp falls from current BEI levels, given the value of embedded floor options, and thus continue to view JGBi breakevens as quite an attractive buy from a risk/reward perspective. We maintain our JGBi long position on both a real yield and BEI basis (see Trade Ideas).

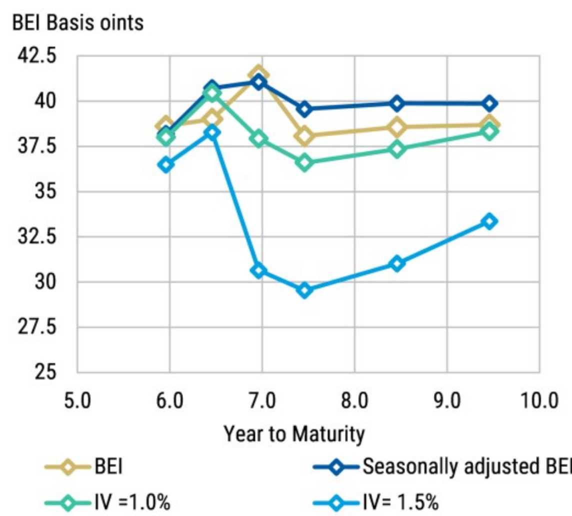
Finally, we believe that JGBI20 looks cheap on the BEI curve after excluding seasonal factors and the expensive floor valuation (the strike level of JBI20 is the highest on the curve). JBI19 looks cheap on the curve if we exclude both factors (see Exhibit 52).

Exhibit 51: Actual 10y BEI vs. model BEI



Source: Morgan Stanley Research

Exhibit 52: BEI curve valuation



Source: Morgan Stanley Research

Money Markets

Euro area

The ECB and ESMA have announced the formation of a working group to work on identification and adoption of a risk-free overnight rate to become an alternative to Euribor and Eonia. At the same time the ECB will develop a new O/N unsecured rate based on a broad range of transactions. The move indicates the possibility of a new O/N unsecured rate to replace Euribor and EONIA by 2020/21 as part of the global move to replace Libor.

Euro area - The death of Euribor and EONIA?

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In ECB is now on board on Euribor/Eonia reform

The European Securities and Market Authorities (ESMA) announced (announcement) this week that a new working group has been formed between the ECB, the ESMA, the Financial Services and Markets Authorities (FSMA) and the European Commission to work on the identification and adoption of a **risk-free overnight rate** which can serve as a basis for an alternative to current interest rate benchmarks in the euro area.

Exhibit 53: Global development on alternative reference rates

	United States	UK	Japan	Switzerland
Working Group	Alternative Reference Rate Committee (ARRC)	Working Group on Sterling Risk-Free Reference Rates	Study Group on Risk-Free Reference Rates	National Working Group
Sponsor Central Bank	Federal Reserve Board	Bank of England	Bank of Japan ("BOJ") Japan Financial Services Agency (Observer)	Swiss National Bank
Alternative RFR proposed/selection	Selected Secured Broad Overnight Treasuries Repo Rate (Jun 2017)	Selected Unsecured Reformed Sonia (Apr 2017)	Selected Unsecured TONAR (Dec 2016)	Selected Secured SARON, an overnight GC Repo Rate (Feb 2016)
Transition strategy	"Paced" transition, eventually replacing LIBOR	Not yet determined	Not determined at this time; current focus is on how to increase liquidity of OIS market	Termination of the TOIS fixing 12/29/17; SARON to replace TOIS in advance

Source: Fed, BoE, BoJ, SNB, Morgan Stanley Research

This move is meant to catch up with the US, UK, Switzerland and Japan where the central banks and regulatory bodies have been working on alternative risk-free reference rates (RFR) to replace the Libor benchmark in response to the FSB' advice on Reforming Major Interest Rate Benchmark.

Those regions have already identified the appropriate RFRs respectively and the FCA has advised that Libor should be replaced with the new RFRs in the respective regions by 2021, where the UK and Japan have chosen unsecured O/N rates whilst the US and Switzerland have chosen O/N secured rates (see Exhibit 53).

The new O/N unsecured rate

At the same time, the ECB has announced (announcement) it will develop a new euro unsecured overnight rate based on data already available to the Eurosystem. The highlevel features of this new overnight rate, i.e. scope of transactions and calculation methods, will be communicated to market participants in the course of 2018, and the rate will be produced before 2020.

Such a move, together with the formation of the new working group, suggests that the inclination for Europe will likely to be to choose an O/N unsecured rate to be the RFR, similar to the UK and Japan.

The difference between EONIA vs the new o/n rate

As we know, Eonia is currently under review by the EMMI, which is set to provide public consultation in late 2017 and feedback by Feb 18. We wrote in the EONIA review and beyond that the likely outcome of the Eonia review could be similar to the reformed Sonia where the new Eonia would not be likely to result in a significantly lower fixing than the current Eonia.

However, the new O/N unsecured rate to be developed by the ECB is set to look beyond Eonia. The ECB highlighted in its Q&A regarding the new o/n rate (link) that the new rate will be built on the daily data submission of the 52 banks submitted to the ECB since Jul 16 under the new MMSR (money market statistical reporting) regulation. The institution it covers is much broader than the 26 panel banks under the Eonia panel.

Furthermore, the reported transactions under the MMSR, which is yet to be published by the ECB, will include transactions between reporting banks beyond the interbank market, i.e. transactions between the reporting banks and other financial and nonfinancial institutions. This could imply much broader transaction inclusion compared to Eonia.

However, whether the new O/N unsecured rate will be significantly different to the current Eonia will also depend on the calculation method. The current Eonia is based on the weighted average of all the transactions; the reformed Eonia could also alter the methodology. Looking at the UK's experience, the reformed Sonia which is set to be used as the RFR has also included a broader transaction base and altered the calculation method to a trimmed median, which will only result in ~1bp difference to the current Sonia.

Looking forward

The move by the ECB and ESMA is clearly to catch up with the global move towards interest rate benchmark reform by 2021, as suggested by the FCA. The ECB is likely to leverage the review conclusion of both Euribor reform and Eonia review, which will likely provide feedback by 2018, as part of the new O/N unsecured rate development and RFR identification process.

Given the market structure of Europe, where an unified euro secured rate does not exist as each sovereign has their own GC rate which trades with a wide dispersion, it is unlikely Europe will choose a secured rate as the RFR like the US in our view. And given the progress of Euribor reform where a transaction based rate has proved to be not practical as a result of the May 17 review update, a transaction based O/N unsecured rate which is being developed by the ECB is likely to be chosen as the RFR for the euro area, in our view.

The difference between the new O/N rate versus the current Eonia will be key. The experience from the UK where a reformed Sonia which fixes close to the current Sonia is set to become the RFR would suggest a similar move in the euro area.

However, in the long-term, i.e. by 2021, the new RFR will ultimate be the new benchmark for new financial transitions to be based upon. Euribor and Eonia will continue to exist for continuity of legacy positions, but new financial instruments (futures, swap) will likely to be established well ahead of the 2021 timeline to allow for smooth transition given the sheer size of markets that is impacted.

Derivatives

United States

We suggest two trades to position for a December hike: 1) conditional bear flattener on 2s30s with attractive vol RV and 2) 3-month cap ladder that pays out over 3x the initial premium. Both structures share our macro view of a December hike and uses options to enhance the risk/reward profile.

United Kingdom

Despite the recent correction, we recognize that implied volatility might still look optically cheap on an outright basis. However, we no longer like being outright long volatility. Indeed, the 3m implied/realized ratio suggests that the current levels are in line with the 2014-17 period, implied has not followed the continued rates market sell-off this week and already started to grind lower and, more importantly, hedge funds are likely to come back to sell vol as part of carry strategies, depressing the size of the volatility risk premium.

United States - Superior Risk / Reward by Using Options

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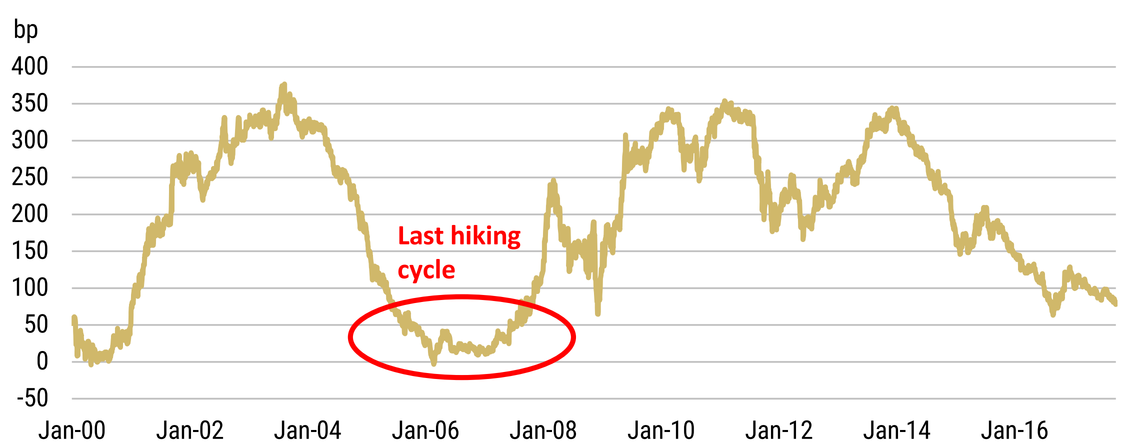
Trade Idea 1 – Bear flattener enhanced by vol

As a tactical trade, we like 2s30s flatteners into the December FOMC. By using swaptions, we can get into a better curve entry than what the forwards are implying. We like buying a 3m2y payer ATMF vs selling a 3m30y payer ATMF + 10bps for zero cost. As a 3-month trade, we would take this to expiry, which is just after the December meeting.

Exhibit 54: 30Y - 2Y swap spread



Source: Morgan Stanley Research

The OIS market is implying about a 60-65% chance of a rate hike. As we approach the meeting, and assuming the FOMC wants to hike, the front end should continue to drift higher and the curve should bear flatten. Exhibit 54 shows the spread between 30 year swap rates versus 2 year swap rates. During the last hiking cycle, this spread approached 0. Currently, the forwards are pricing in about 72 bps. Using payer swaptions, we can construct a zero cost trade that is 10 bps steeper, due to the vol RV.

Trade idea: Buy 3m2y payer swaption ATMF in 900mm vs. Sell 3m30y payer swaption ATMF +10bps in 100mm for 0 cost

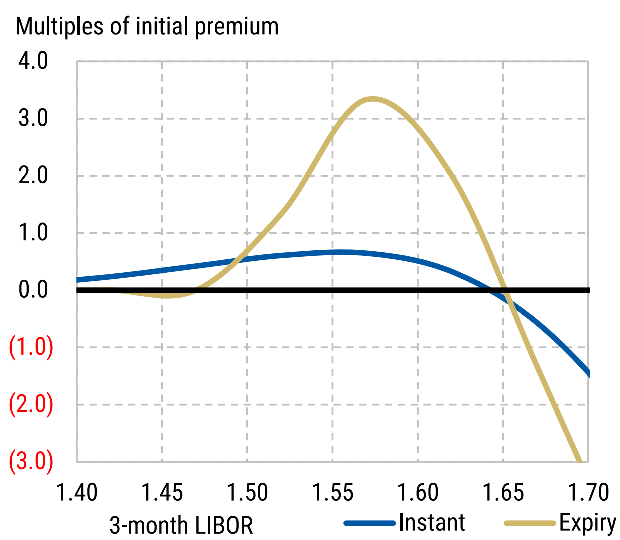
Trade Idea 2 – December hike structure for over 3x payout

An interesting way to position for a December hike can be constructed using caps. Using some assumptions, we can project where 3-month LIBOR should settle after a December hike (assuming it happens). Today, 3mL is 1.32%, which means it should settle around 1.57% after a 25 bps hike, if we assume no change in FRA/OIS. Accounting for some drift in FRA/OIS, we can project LIBOR to be between 1.55% to 1.60%, roughly.

One can construct a 3m cap ladder by buying a 1.50% strike, selling a 1.55% strike and selling another 1.60% strike. This structure costs 1.5bps running or 0.375c upfront. This structure is selling the upper end of the distribution for LIBOR going above 1.65%. There are essentially three potential payoff scenarios:

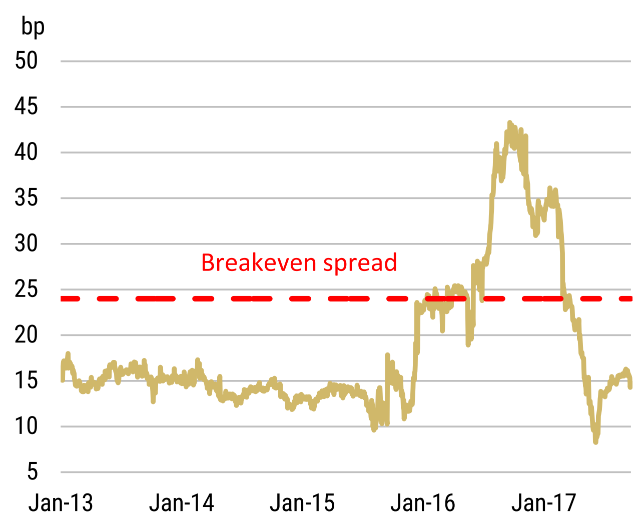
1. FOMC hikes in December --> 3ml settles between 1.55% - 1.60% --> payoff is 3.3x premium
2. FOMC stays on hold in December --> LIBOR doesn't move --> lose premium
3. FOMC hikes and FRA/OIS widens more than 24 bps --> lose more than premium

Exhibit 55: Payoff versus 3-month LIBOR



Source: Morgan Stanley Research

Exhibit 56: FRA/OIS Spread



Source: Morgan Stanley Research

Exhibit 55 shows the payoff profile versus 3mL. Comparing this to paying OIS swaps, we think this offers better risk / reward. The risk scenario is that FRA/OIS widens dramatically after a hike. However we don't think that scenario is likely given there are no signs of funding / liquidity stress. Exhibit 56 shows the historical FRA/OIS spread. The widening earlier this year was associated with money market reform and has since come right back down to 16bps currently. Futhermore, an additional advantage of doing this in caps as opposed to Eurodollar options is the flexility of strikes and dates.

Trade idea: Buy 3m caplet k=1.50% vs.
Sell 3m caplet k=1.55%
Sell 3m caplet k=1.60%
Client pays 1.5bps running or 0.375c upfront (offer)

United Kingdom - No more long vol

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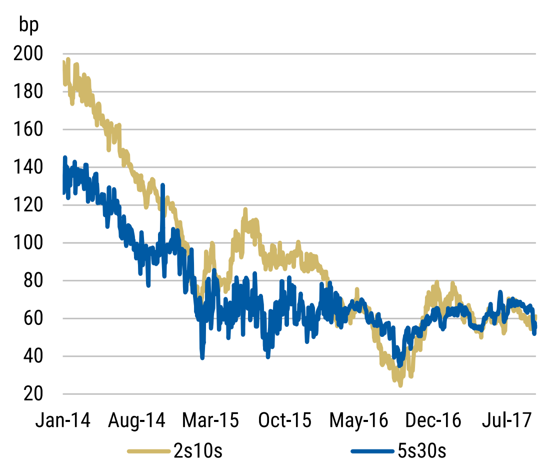
The market now expects two hikes by end-2018

The BoE minutes clearly signalled that the MPC is ready to make policy less accommodative if economic data continue to reveal an erosion in slack stronger than what was envisaged in the August Inflation Report, reducing its tolerance for above-target inflation.

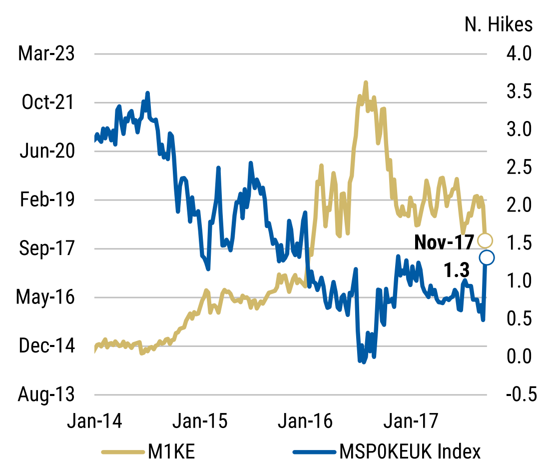
This message has been reiterated in a recent speech by Carney, which described Brexit as a (de)globalization shock likely to be inflationary as well as by Vlieghe, so far a dovish member of the MPC.

Exhibit 57: GBP 2s10s and 5s10s curves



Source: Morgan Stanley Research, Bloomberg

Exhibit 58: M1KE and P0KE



Source: Morgan Stanley Research, Bloomberg

The obvious outcome has been a substantial bear flattening as the sell-off has been primarily driven by the front end (see Exhibit 57), leaving the market pricing a first 25bp hike in November 2017 and 1.3 hikes in the following 12 months (see Exhibit 58), as our POKE and M1KE indicators show.

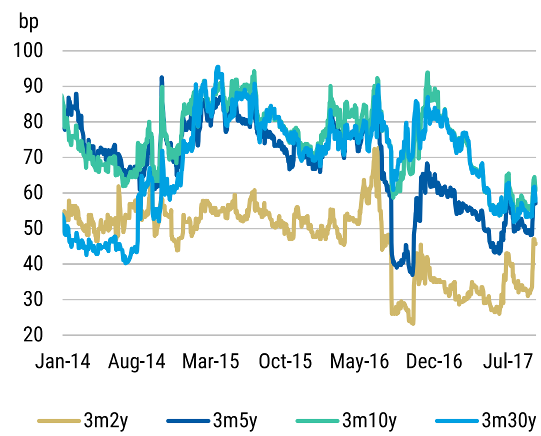
We no longer like being long vol

Consistent with the rates market, implied volatility increased significantly from the August lows and logically 2y and 5y tails, the more sensitive to short-term rate expectations, outperformed other points of the surface.

Despite the recent correction, we recognize that implied volatility might still look optically cheap on an outright basis (see Exhibit 59). However, we no longer like being outright long volatility.

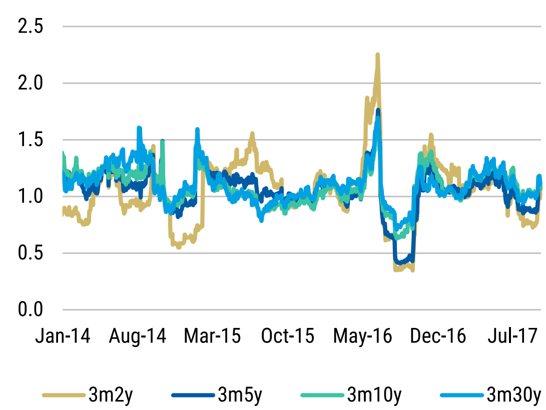
Indeed, the 3m implied/realized ratio (see Exhibit 60) suggests that the current levels are in line with the 2014-17 period, implied has not followed the continued rates market sell-off this week and has already started to grind lower and, more importantly, hedge funds are likely to come back to sell vol as part of carry strategies, depressing the size of the volatility risk premium.

Exhibit 59: Implied volatility (3m expiries)



Source: Morgan Stanley Research, Bloomberg

Exhibit 60: 3m implied/realized (3m expiries)



Source: Morgan Stanley Research, Bloomberg

As a consequence, we no longer recommend being long volatility via calendar spreads (see Global Interest Rate Strategist: The Central Banker Sell-Off) and we suggests to take profit on the structure.

At the same time, we still don't think it is time to be short volatility as, should the pace of rate hikes increase and get closer to early 2015 levels (i.e., ~2 hikes next year), implied volatility on the front end is likely to move substantially higher.

Supply

In the US, new 2y, 5y, 7y USTs will be issued for a total of $88bn. These will settle in the week after next when $3bn coupons and $67bn redemptions will be paid. 2y FRN will be re-opened for $13bn. **In the euro area,** we expect €13bn nominal supply (from GER, ITA) against €3bn of coupons and €7.5bn of redemptions. Average gross nominal supply for the same week of the past three years is €9bn. **In the UK,** there will be no nominal supply or cash coming into the market. UKTi 0.125% Gilt 2036 will be tapped £0.95bn. **In Japan,** 2y JGB will be issued for ¥2.2trn and 40y, for ¥0.5trn, against ¥2.3trn coupons and ¥16trn redemptions. **In Canada,** 30y GCAN will be issued for an estimated $1.2bn against no cash flow. **In Australia,** ACGB 2.75% Nov 2027 will be issued for $700mn, ACGB 2.75% Nov 2028 will be issued for $800mn, against no cash flows. ACGB 2.75% Nov 2028 will be issued for $150mn. **In New Zealand,** NZGB 3.50% Apr 2033 will be issued for $150mn, against no cash flows**.**

Exhibit 61: Sovereign supply calendar

Monday	Tuesday	Wednesday	Thursday	Friday
25-Sep	26-Sep	27-Sep	28-Sep	29-Sep
ITA: BTP Announcement	ITA: BTPei Auction, €1-1.5bn BTPei 0.1% May 2022 and BTPei 1.25% Sept 2032 ITA: CTZ May 2019, €1-1.5bn GER: BKO Sep 2019 Tap, €4bn US: New 2y UST, $26bn JPN: 40y JGB Auction, ¥500bn AUS: ACGB I/L 2.5% Sep 2030, $150mn	UK: UKTi 0.125% Gilt 2036, £0.95bn US: New 5y UST, $34bn US: 2y FRN Reopening, $13bn AUS: ACGB 2.75% Nov 2027 Tap, $700mn	ITA: BTP Auction, €7-8bn* US: New 7y UST, $28bn JPN: 2y JGB Auction, ¥2200bn CAN: 30y GCAN, $1.2bn*	NZ: NZGB 3.50% Apr 2033 Tap, $150mn AUS: ACGB 2.75% Nov 2028 Tap, $800mn
2-Oct	3-Oct	4-Oct	5-Oct	6-Oct
	JPN: 10y JGB Auction, ¥2300bn*	GER: DBR Aug 2027, Tap €3bn AUS: ACGB Auction $800mn*	FRA: Long term auction, €8bn* SPA: SPGB Auction, €4-5bn* JPN: 10y JGBei Auction, ¥400bn* UK: UKT 0.75% Gilt 2023 Tap, £2.75bn*	AUS: ACGB Auction $800mn*
9-Oct	10-Oct	11-Oct	12-Oct	13-Oct
ITA: BTP Announcement	UK: UKT 1.75% Gilt 2037 Tap, £2bn*	GER: OBL Oct 2022 Tap, €3bn US: New 3y UST, $24bn* US: 10y UST Reopening, $20bn* JPN: 30y JGB Auction, ¥800bn* AUS: ACGB Auction $800mn* NETH: DSL Jan 2024 New, €5-7bn*	ITA: BTP Auction, €6bn* US: 30y UST Reopening, $12bn* NZ: NZGB Auction $150mn**	JPN: Auction for Enhanced-liquidity, ¥500bn* AUS: ACGB Auction $800mn*
16-Oct	17-Oct	18-Oct	19-Oct	20-Oct
	GER: BKO Sep 2019 Tap, €4bn JPN: 20y JGB Auction, ¥1000bn*	GER: DBR Aug 2048 Tap, €1bn AUS: ACGB Auction $800mn*	FRA: Medium term auction, €7-8bn* FRA: Index linked auction, €1-1.5bn* SPA: SPGB Auction, €5bn* US: 30y TIPS Re-opening, $6bn* JPN: 5y JGB Auction, ¥2200bn* UK: UKT 1.25% Gilt 2027 Tap, £2.5bn* NZ: NZGB Auction $150mn**	AUS: ACGB Auction $800mn*

Source: Morgan Stanley Research, Treasuries
* Morgan Stanley estimate. ** Auction date not announced by the Treasury

Bond Market Indicators

Latest readings

Exhibit 62: Morgan Stanley Bond Market Indicators - BMI(10)

	Vol Adj. Carry	Momentum	Equity Markets	Business Cycle	FX/Rates	Average	Overall
UST	-2.2 (-2.4)	6.0 (9.4)	-3.3 (-2.1)	-5.5 (-5.3)	2.8 (3.8)	-0.4 (0.7)	**0.0 (0.0)**
DBR	4.2 (3.6)	1.7 (4.7)	-3.3 (-2.8)	-4.2 (-1.7)	-5.6 (-3.7)	-1.4 (0.0)	**0.0 (0.0)**
UKT	3.7 (2.7)	-7.1 (7.8)	0.5 (0.9)	-5.2 (-5.2)	1.7 (4.3)	-1.3 (2.1)	**0.0 (0.0)**
JGB	-3.8 (-3.2)	5.0 (7.9)	-3.9 (-1.9)	-4.0 (-4.0)	0.6 (-1.4)	-1.2 (-0.5)	**0.0 (0.0)**
ACGB	8.1 (7.9)	-4.9 (-2.7)	0.8 (-1.5)	-0.7 (-2.7)	8.1 (4.3)	2.3 (1.1)	**0.0 (0.0)**
NZGB	6.7 (6.5)	-1.3 (2.6)	-0.2 (-1.6)	-4.5 (-7.2)	-9.3 (-7.4)	-1.7 (-1.4)	**0.0 (0.0)**
CAN	-6.3 (-7.1)	-9.1 (-7.5)	-3.5 (-1.3)	9.6 (9.6)	4.8 (4.8)	-0.9 (-0.3)	**0.0 (0.0)**

Source: Morgan Stanley Research
Note: Positive # = long duration; Negative # = short duration, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10, Overall signal set to zero if abs(Signal)<=1.5

Exhibit 63: Morgan Stanley Bond Market Indicators - BMI(2)

	Vol Adj. Carry	Momentum	Equity Markets	Business Cycle	FX/Rates	Average	Overall
UST	3.1 (-0.5)	3.6 (9.9)	-3.3 (-2.1)	-5.5 (-5.3)	1.6 (0.5)	-0.1 (0.5)	**0.0 (0.0)**
DBR	-7.5 (-8.3)	7.1 (7.2)	-3.3 (-2.8)	-4.2 (-1.7)	-5.9 (-6.5)	-2.7 (-2.4)	**-2.7 (0.0)**
UKT	6.8 (5.5)	-9.0 (5.6)	0.5 (0.9)	-5.2 (-5.2)	0.6 (4.3)	-1.2 (2.2)	**0.0 (0.0)**
JGB	-9.1 (-7.8)	7.3 (8.0)	-3.9 (-1.9)	-4.0 (-4.0)	1.2 (1.3)	-1.7 (-0.9)	**-1.7 (0.0)**
ACGB	9.1 (8.3)	-5.8 (-8.4)	0.8 (-1.5)	-0.7 (-2.7)	4.3 (1.1)	1.6 (-0.6)	**0.0 (0.0)**
NZGB	5.9 (4.7)	3.1 (5.4)	-0.2 (-1.6)	-4.5 (-7.2)	-7.5 (-5.5)	-0.6 (-0.8)	**0.0 (0.0)**
CAN	4.0 (2.9)	-9.6 (-9.1)	-3.5 (-1.3)	9.6 (9.6)	5.1 (5.9)	1.1 (1.6)	**0.0 (0.0)**

Source: Morgan Stanley Research
Note: Positive # = long duration; Negative # = short duration, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10, Overall signal set to zero if abs(Signal)<=1.5

Exhibit 64: Morgan Stanley Bond Market Indicators - xBMIs

	DBR/UKT	DBR/JGB	DBR/UST	UKT/JGB	UKT/UST	JGB/UST
Overall	**0.0 (0.0)**	**0.0 (0.0)**	**0.0 (0.0)**	**0.0 (2.5)**	**0.0 (0.0)**	**0.0 (0.0)**
Average xBMI	-3.0 (-3.0)	-0.6 (0.8)	-2.6 (-2.6)	0.6 (2.5)	2.1 (4.2)	-0.2 (-1.0)
Combined BMI differential	0.0 (-2.1)	0.0 (0.0)	0.0 (0.0)	0.0 (2.1)	0.0 (2.1)	0.0 (0.0)
FX/Rates	-6.1 (-3.9)	-1.2 (1.6)	-5.3 (-5.2)	1.1 (2.9)	4.3 (6.2)	-0.5 (-1.9)
	ACGB/NZGB	**ACGB/CAN**	**ACGB/UST**	**NZGB/CAN**	**NZGB/UST**	**CAN/UST**
Overall	**2.0 (0.0)**	**0.0 (0.0)**	**4.4 (0.0)**	**0.0 (0.0)**	**0.0 (0.0)**	**0.0 (0.0)**
Average xBMI	3.8 (1.9)	1.3 (-1.3)	4.4 (2.3)	-1.8 (-1.8)	1.7 (2.1)	2.3 (1.6)
Combined BMI differential	4.0 (0.0)	2.3 (0.0)	2.3 (0.0)	-1.7 (0.0)	-1.7 (0.0)	0.0 (0.0)
FX/Rates	3.7 (3.8)	0.3 (-2.5)	6.4 (4.7)	-1.9 (-3.6)	5.1 (4.2)	4.7 (3.1)

Source: Morgan Stanley Research
Note: Positive # = long cross market spreads; Negative # = short cross market spread, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -15 and +15, Signal is calculated as the average of Combined BMI differential and the FX component. Signal is set to zero if abs(Signal)<=2 and/or its has a sign different from the Combined BMI differential

How to read the xBMIs

The "FX/Rates" row displays the FX/rates relationship signal. The "Combined BMI differential" row displays the difference between the relevant BMI(10) signals after having applied the signal strength check, i.e., abs(signal) >= 1.5. The "Average xBMI" row displays the average of the "FX/Rates" and "Combined BMI differential" rows. And the "Overall" score requires that the sign of the "Average xBMI" signal match the sign of the "Combined BMI differential" signal and be ≥ the absolute value of 2.

Exhibit 65: Morgan Stanley Euro Sovereign Bond Market Indicators - eBMI

	Business Cycle Surprises	Momentum	Vol. Adj. Carry	Supply	Risky Assets	Overall
Periphery vs. Core	-4.5 (-4.2)	-0.1 (0.7)	10.0 (10.0)	-4.4 (7.7)	4.9 (4.1)	**1.2 (3.7)**
Semi-Core vs. Core	-4.1 (-5.3)	3.0 (-0.9)	7.1 (7.3)	8.3 (-6.0)	-6.2 (-5.2)	**1.6 (-2.0)**
Periphery vs. Semi-Core	-0.2 (0.6)	-1.5 (0.8)	1.4 (1.3)	-6.4 (6.9)	5.6 (4.7)	**-0.5 (5.7)**

Source: Morgan Stanley Research
Note: Positive # = long spreads; Negative # = short spreads, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10.

Exhibit 66: Morgan Stanley Inflation Bond Market Indicators - iBMI

	Crude Oil	Momentum	Equities	Value	Average	Overall
TIPS	2.8 (2.5)	-0.2 (-4.7)	1.5 (0.4)	-0.8 (0.3)	0.0 (0.0)	**0.0 (0.0)**
UKTi	2.0 (2.3)	6.0 (2.0)	0.1 (0.6)	-5.3 (-5.3)	0.0 (0.0)	**0.0 (0.0)**
HICPxT	2.6 (1.5)	2.9 (2.3)	1.8 (0.5)	-6.3 (-6.3)	0.0 (0.0)	**0.0 (0.0)**
JGBi	2.7 (1.6)	-7.7 (-6.6)	1.1 (0.2)	4.4 (4.7)	0.0 (0.0)	**0.0 (0.0)**

Source: Morgan Stanley Research
Note: Positive # = long inflation breakeven; Negative # = short inflation breakeven, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10, Overall signal set to zero if abs(Signal)<=1.0

Performance history

Exhibit 67: Morgan Stanley Bond Market Indicators - BMI(10) - Performance history

	UST	DBR	UKT	JGB	ACGB	NZGB	CAN
1-Week Return	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
YTD Return	-4.2%	-0.8%	-9.2%	0.7%	-4.9%	2.1%	-2.1%
1-Year Return	1.3%	9.0%	-9.6%	5.1%	-5.9%	5.1%	16.7%
1-Year Return Vol	0.16	0.12	0.18	0.12	0.12	0.04	0.25
1-Year Sharpe Ratio	0.08	0.73	-0.54	0.43	-0.48	1.22	0.67
1-Year Hit Ratio	53%	50%	50%	42%	29%	100%	50%

Source: Morgan Stanley Research

Exhibit 68: Morgan Stanley Bond Market Indicators - BMI(2) - Performance history

	UST	DBR	UKT	JGB	ACGB	NZGB	CAN
1-Week Return	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
YTD Return	-0.1%	-0.7%	-0.7%	-0.6%	0.3%	0.3%	-0.2%
1-Year Return	-0.1%	-0.6%	-0.6%	-0.4%	0.4%	0.3%	1.9%
1-Year Return Vol	0.6%	1.3%	1.9%	0.7%	1.5%	1.7%	3.4%
1-Year Sharpe Ratio	-0.20	-0.46	-0.32	-0.51	0.30	0.15	0.54
1-Year Hit Ratio	25%	41%	42%	32%	57%	100%	55%

Source: Morgan Stanley Research

Exhibit 69: Morgan Stanley Bond Market Indicators - xBMI - Performance history

	DBR/UKT	DBR/JGB	DBR/UST	UKT/JGB	UKT/UST	JGB/UST
Info ratio	-1.25	3.61	0.17	-0.88	1.42	0.64
Hit ratio	42%	75%	52%	58%	42%	47%
Non-Zero	60%	23%	44%	50%	50%	37%
	ACGB/NZGB	**ACGB/CAN**	**ACGB/UST**	**NZGB/CAN**	**NZGB/UST**	**CAN/UST**
Info ratio	-0.07	1.70	4.23	-0.39	0.90	-0.01
Hit ratio	35%	78%	70%	54%	71%	36%
Non-Zero	38%	35%	19%	46%	13%	42%

Source: Morgan Stanley Research

Exhibit 70: Morgan Stanley Bond Market Indicators - eBMI - Performance history

	Periphery vs. Core	Semi-Core vs. Core	Periphery vs. Semi-Core
1-Week Return	0.3%	-0.1%	0.2%
1-Year Return	3.7%	-7.0%	7.4%
1-Year Return Vol	8.5%	5.0%	5.9%
1-Year Sharpe Ratio	0.43	-1.40	1.26
1-Year Hit Ratio	53.8%	44.2%	55.8%

Source: Morgan Stanley Research

Exhibit 71: Morgan Stanley Bond Market Indicators - iBMI - Performance history

	TIPS	UKTi	HICPxT	JGBi
1-week Return	0.0%	0.0%	0.0%	0.0%
YTD Return	2.6%	0.5%	0.7%	-0.7%
1-year return	5.7%	1.4%	0.8%	1.4%
1-Year Return Vol	2.8%	2.3%	1.7%	1.1%
1-Year Sharpe ratio	2.04	0.60	0.46	1.20
1-Year Hit ratio	64.7%	56.0%	56.0%	54.2%

Source: Morgan Stanley Research

In Case You Missed It

US Public Policy, Economics, & Strategy: Fiscal Policy - Life in the Slow Lane

21 September 2017

We're skeptical of bipartisanship & Q4 is a logjam, but tax reform should make slow progress toward 2018 passage even as failure risks remain. Deficit expansion is part of the deal, but limited in scope & stimulus. Yet this may be enough for risk assets near term. We see 5 key investment themes.

US Economics & Strategy: FOMC Reaction: Disconnecting the Dots from Inflation

20 September 2017

As expected, the Fed skipped hiking rates at its September meeting to announce balance sheet drawdown beginning in October. We look for the Fed to resume its gradual path of hikes again in December, a message it drove home by firming up the dots despite having marked down inflation.

Global Interest Rate Strategist: Time to Shrink a Balance Sheet

15 September 2017

Two central banks down, two to go. The cautious tone from the ECB was drowned out by the hawkish tone from the BoE. The Fed and the BoJ headline the coming week with the tone from both likely to reflect the status quo with one exception: we expect the Fed to announce balance sheet normalization.

Germany Election: Short-term Stability, Long-term Legacy

13 September 2017

Chancellor Angela Merkel is likely to win a fourth mandate. Despite strong economic performance, key challenges have to be addressed by the next parliament. Depending on junior coalition partners, policies could differ significantly.

UK Economics & Strategy: MPC Preview: 7-2 Hold

11 September 2017

With mixed data since the August Inflation Report, we see the MPC keeping rates on hold by a margin of 7-2. But a hawkish shift remains possible with the output gap closed and inflation above target.

European Interest Rate Strategist: A Dovish ECB

8 September 2017

The ECB sent a dovish message to the markets as investors return from holidays. Despite the caution, the path towards renormalisation remains intact, in our view. We are biased to be short, both outright and via options.

US Economics & Strategy: What's Eating Away at Inflation

6 September 2017

It's time to recognize the multitude of unavoidable, longer-term influences affecting inflation—weakness is not 'idiosyncratic'. Bowing to these factors, we lower our estimated monthly growth in inflation, and take down the path for rate hikes next year.

Forecasts

For details on the macro narratives surrounding our forecasts below, please see Global Macro Mid-Year Outlook: Transitioning to Self-Sustaining Growth, June 4, 2017, and Global Strategy Mid-Year Outlook: Climbing the Last Wall of Worry, June 4, 2017. We last updated our forecasts on June 4, 2017.

Exhibit 72: Morgan Stanley sovereign 10-year yield bull, base, and bear case forecasts

	Bull					Base					Bear				
	Sep 21	3Q17	4Q17	1Q18	2Q18	Sep 21	3Q17	4Q17	1Q18	2Q18	Sep 21	3Q17	4Q17	1Q18	2Q18
US	2.28	2.30	2.20	2.00	1.75	2.28	2.50	2.45	2.45	2.40	2.28	2.80	2.85	2.85	2.95
Germany	0.46	0.20	0.00	-0.30	-0.30	0.46	0.50	0.60	0.70	0.80	0.46	0.70	1.00	1.25	1.50
Japan	0.04	0.03	0.03	0.00	0.03	0.04	0.05	0.08	0.20	0.20	0.04	0.08	0.20	0.25	0.30
UK	1.37	0.80	0.50	0.50	0.50	1.37	1.10	1.00	1.00	0.95	1.37	1.30	1.75	1.90	2.00
Australia	2.83	2.56	2.38	2.09	1.87	2.83	2.75	2.60	2.55	2.45	2.83	2.94	3.00	3.05	3.13
Austria*	17	22	22	25	25	17	27	27	30	30	17	30	32	35	35
Netherlands*	12	15	15	20	25	12	20	20	25	27	12	25	25	30	35
France*	28	40	40	45	50	28	50	50	60	60	28	50	60	75	80
Belgium*	28	30	35	40	45	28	40	45	50	55	28	45	50	60	65
Ireland*	29	50	50	50	55	29	55	55	60	65	29	75	75	90	95
Spain*	116	110	110	125	130	116	120	125	135	140	116	140	150	190	200
Italy*	165	160	165	170	180	165	180	190	205	215	165	195	220	280	290
Portugal*	197	255	250	260	270	197	265	270	280	300	197	290	300	310	330

Source: Morgan Stanley Research
* Yield spread to German Bunds

Exhibit 73: Morgan Stanley sovereign 2-year, 5-year, and 10-year yield base case forecasts

	2Y					5Y					10Y				
	Sep 21	3Q17	4Q17	1Q18	2Q18	Sep 21	3Q17	4Q17	1Q18	2Q18	Sep 21	3Q17	4Q17	1Q18	2Q18
US	1.44	1.50	1.50	1.60	1.65	1.89	2.05	2.00	2.05	2.05	2.28	2.50	2.45	2.45	2.40
Germany	-0.68	-0.65	-0.60	-0.55	-0.50	-0.26	-0.30	-0.15	-0.05	0.20	0.46	0.50	0.60	0.70	0.80
Japan	-0.13	-0.18	-0.18	-0.10	-0.10	-0.10	-0.13	-0.13	-0.05	-0.05	0.04	0.05	0.08	0.20	0.20
UK	0.45	0.10	0.10	0.10	0.10	0.77	0.45	0.40	0.40	0.35	1.37	1.10	1.00	1.00	0.95
Australia	1.99	1.75	1.70	1.65	1.60	2.38	2.25	2.15	2.10	2.05	2.83	2.75	2.60	2.55	2.45
Austria*	10	12	12	15	15	2	15	15	18	18	17	27	27	30	30
Netherlands*	1	10	10	13	15	-5	5	5	10	12	12	20	20	25	27
France*	21	25	20	25	25	10	30	30	40	40	28	50	50	60	60
Belgium*	16	15	20	20	25	8	20	25	25	30	28	40	45	50	55
Ireland*	19	30	25	30	35	12	30	30	35	40	29	55	55	60	65
Spain*	37	45	50	60	65	53	70	80	90	95	116	120	125	135	140
Italy*	45	60	80	85	85	97	130	145	160	170	165	180	190	205	215
Portugal*	66	80	85	90	100	119	185	175	180	200	197	265	270	280	300

Source: Morgan Stanley Research
* Yield spread to German Bunds

Trade Ideas

Below you will find a list of our current trade ideas, entry levels, entry dates, rationales, and risks.

Trade	Entry Level	Entry Date	Rationale	Risks
Duration and Curves				
Enter EDZ7/EDZ8 flatteners	0.350%	22-Sep-17	On average, the market has traded with a negative term premium worth ~1.75 x 25bp rate hikes. After the hawkish FOMC meeting, the amount of negative term premium only amounts to ~1.25 x 25bp rate hikes. Through this lens, the pricing of the pace of rate hikes looks slightly stretched.	If August core PCE inflation surprises to the upside on Friday, September 29.
Enter EDZ7/EDZ9 flatteners	0.525%	22-Sep-17	On average, the market has traded with a negative term premium worth ~1.75 x 25bp rate hikes. After the hawkish FOMC meeting, the amount of negative term premium only amounts to ~1.25 x 25bp rate hikes. Through this lens, the pricing of the pace of rate hikes looks slightly stretched.	If August core PCE inflation surprises to the upside on Friday, September 29.
Enter 2s30s UST curve flatteners	138bp	15-Sep-17	We see the biggest risk to our economist's call for status quo as a lower median longer-run dot - possibly falling to 2.75% from 3.00%.	A lower 2018 median dot against a longer-run median dot that remains at 3.00%.
Short 1y1y EONIA	-0.28%	1-Sep-17	Repricing of a higher probability of removal of negative depo rates in the next two years.	ECB turning out more dovish than what the market currently anticipates
Receive 2y GBP vs. EUR	0.75%	21-Jul-17	The xBMI recommends being long UK vs. EUR rates and we expect the MPC to raise rates less than the market is pricing.	The MPC turns more hawkish, most likely in response to stronger inflation data.
Long Jan-45 Jul-65 vs. Dec-55 Gilts	-9bp	6-May-16	Position has positive carry roll and convexity pick-up	Idiosyncratic price action and declining volatility
Long Jan-60 vs. Dec-55 Gilt	0.4bp	29-May-15	We think the convexity value of ultra longs is underpriced	Idiosyncratic price action and declining volatility
Enter JGB 10s20s flattener	53bp	1-Sep-17	We see little prospect of 10y yields dropping further as most domestic investors will have no incentive to buy at sub-zero yields. Also, the BoJ has gradually reduced its purchases from the 5y-10y sector. 20y JGBs carry and rolldown remains attractive.	Continued demand for 10y JGBs poses a risk to the flattener.

Trade	Entry Level	Entry Date	Rationale	Risks
Sovereigns and Supply				
Buy RAGB 2117 vs Sell RAGB 2062	30bp	15-Sep-17	Taking forward curve shape and convexity into account, the 100y looks cheap vs the 50y. Moreover, post-syndication price action is generally followed by a richening on the newly issued bond	50y point of the curve outperforms significantly

Long BTP Apr-22 vs. short BTP Mar-47	250	1-Sep-17	The curve has already been steepening, which could continue with potential supply pressure. The curve would also continue to steepen if BTP yield sells off further and it carries 11bp/quarter.	Supply remains heavily skewed towards shorter maturity and/or political risk flare up significantly
Buy Gilt 1.5% 07/2047 at 1.79% and sell Gilt 1.75% 09/2037 at 1.78% vs swaps	30bp/30bp	5-May-17	Relative value trade based on Z-spread/yield to maturity vs duration	Majority of investors to continue to value the bonds off surrounding maturity issues and other idiosyncratic pricing issues
Long Low Coupon BTPs vs short High Coupon BTPs portfolio	24bp	3-Feb-17	To protect against rising credit premium in Italy	Political risk subsides
Long Nov-47 vs. Dec-46 UKT	-4bp	23-Sep-16	1H47s offer better value due to their longer duration	Supply optically rich

Inflation

Trade	Entry Level	Entry Date	Rationale	Risks
Short OATi Jul-23s vs. OATei Jul-24s real yield	11bp	7-Sep-17	French inflation is much weaker than Euro inflation	French inflation surprises to the upside
10s30s HICPxT flattener	44bp	4-Aug-17	10y HICPxT is out of line on the curve	Non-traditional inflation investors continue to keep 5y5y and 10y down
Long Nov-47 UKTi vs. Nov-27 UKTi real yield	30bp	7-Jul-17	10y real yields remain rich, while the 30y sector has cheapened into the Nov-56s syndication	The curve continues to steepen
Long Apr-20 UKTi breakeven (versus Sep-20s)	289bp	13-Jun-17	Front-end cash breakevens trade fundamentally cheap versus our economists' and the market's pricing of front-end RPI fixings	Realized inflation comes in much lower than expectations
Long May-22 BTPei on a real yield basis	0.20%	4-Nov-16	BEIs price in a very subdued inflation outcome, our eBMIs turning more bullish on peripheral risk, carry roll is substantial	The curve steepens
3s6s US CPI swap curve steepener	1.75bp	7-Apr-17	We identify value in the CPI swap curve using PCA decomposition	The 3s6s curve flattens
10s30s RPI breakeven steepener	-1bp	29-Jul-16	We expect more hedging premium to be priced into the long end	The curve remains flat
Buy JGBi21 real yield	-46bp	8-Apr-16	JGB linkers have cheapened well beyond reasonable valuations	Breakevens breach the deflation floor
Buy JGBi17 breakeven	10-12bp	6-Mar-16	JGB linkers have cheapened well beyond reasonable valuations	Breakevens breach the deflation floor
Long Nov-19 SPGBei breakeven	0.29%	22-Feb-16	We see value in shorter-dated breakevens with at-the-money deflation floors	Breakevens breach the deflation floor
Long Apr-20 BTP Italia breakeven	-0.02%	22-Feb-16	We see value in shorter-dated breakevens with at-the-money deflation floors	Market positioning is long breakevens

Money Markets

Trade	Entry Level	Entry Date	Rationale	Risks
Receive Mar-18 vs. pay Mar-19 short sterling contract	16bp	8-Sep-17	Although base case is for a hold at the MPC, if hawkish risks materialize, we are likely to see a steepening selloff. Very little is priced into the front end so there is little reward for receiving rates at these levels.	The MPC turns even more dovish, and the chance of a cut starts to be priced back into front-end rates, which could cause curve flattening.
Sell 2y swap spreads	26bp	9-Aug-17	The market is not pricing in a sustained increase in T-bill issuance, which should put upward pressure on repo. Also, carry on 2y spread wideners continue to look unattractive relative to history given tight Libor-repo.	A risk-off move or failure by the Treasury to increase T-bill issuance over the medium-term horizon would lead to widening of 2y spreads.

Receive 6m6m USD/JPY Xccy basis	-47bp	9-Aug-17	Increased T-bill issuance and higher repo rates would drain excess reserves in the banking system and reduce access to USD funding by Japanese lifers.	A sharp drop in USDJPY could lead Japanese lifers to reduce their current FX hedges, which would lead to tightening of the Xccy basis.
Tibor-libor 2s10s flattener	0bp	7-Jul-17	Attractive carry and rolldown, and we expect Tibor-libor fixing spread not to tighten after Tibor reform	Tibor lower after Tibor reform; load hedge paying in the long end
USDJPY basis Rec 7y	-59.5bp	15-Sep-17	Upcoming samurai issuance will push the long-end basis lower.	Yankee issuance continues, thereby tightening pressure on the long-end basis.
Receive 5y5y AUDUSD basis	35bp	21-Aug-17	10y point is supported by JGB repackage flow, and it also provides the attractive vol adjusted rolldown	Reverse Kangaroo issuance increase further

Derivatives

Trade	Entry Level	Entry Date	Rationale	Risks
USD: Buy 3m2y payer ATMF in 900mm vs sell 3m30y Payer ATMF +10bp in 100mm	0c	22-Sep-17	The lowering of the long run FF dot in the FOMC's SEP is likely to lead to a rally in the long end particularly if inflation data continues to disappoint. Meanwhile, the focus of the Fed on maintaining the pace of hikes as a tool to comabt easy financial conditions will lead to flattening of the curve.	Notable improvements in the long term outlook for inflation and/or growth would lead to bear steepening of the yield curve and losses on the trade.
USD: Buy 3m caplet stuck at 1.5% vs sell caplets struck at 1.55% and 1.6% in 1x1x1 notionals	0.4c	22-Sep-17	The payout ratio if the Fed hikes 25bp in December is 3.5x of premium, which is higher than the payout ratio offered by simply paying the Dec 2017 OIS.	Widening of FRAOIS spread could lead to losses on the trade, even if the Fed hikes. If the Fed does not hike in December 2017, premium is lost.
USD: Buy 1y7y 2.0% receiver vs sell 1y30y 2.2% receiver in 235mmx100mm	0c	15-Sep-17	Cheapening of vol on 7y tails relative to 30y tails offers an attractive vol pickup relative to recent history	A large risk-off move in rates could lead to bull flattening of the 7s30s curve leading to losses on the trade
AUD: Buy 3m1y ATMF receiver vs. sell 2x 3m1y ATMF-7bp receiver vs. buy 3m1y ATMF-14bp	1.4c	15-Sep-17	Our inclination is to extract the re-emerged carry via receiver structures that are protected against sell-offs on a terminal basis	1y expires above the current 3m1y rate, or below the current 3m1y rate less 14bp, in which case one would lose the premium spent
RNZD: ec Feb-18 RBNZ OIS vs. pay 1y1y	61bp	15-Sep-17	The rates market has priced in too much uncertainty relating to the elections, and we think the front end can steepen regardless of whether National of Labour win the election. FRA/OIS seasonally widens out of rolls	An inconclusive election outcome as well as general risk-off moves (potentially related to increases in geopolitical tensions).
EUR: Long RXZ7 Nov-17 put option at 161.5 vs short RXZ7 Nov-17 at 164.5. for zero cost	0c	7-Sep-17	Valuations are demanding as yields are currently below levels touched when political risk was at its peak early in 2017. Furthermore, the structure expires one day after October ECB meeting, which is when we think it will announce tapering	Yields continue to fall and/or implied volatility on put collapses, which is likely to happen if expectations for a taper fall to zero and/or economic data deteriorates significantly
JPY: Buy ATM 10y10y Receiver	417bp	1-Sep-17	The roll down on the trade is positive and a risk-off move is likely to lead to bull flattening of the yield curve and support to 10y10y vol due to Bermudan option vega hedging	The risk to the trade is a sell-off in JPY rates associated with selling of vega due to Bermudan book hedging
Euro: 3m30y Euro ATMF+3bp/ATMF+13bp payor spread financed via ATM-17bp receiver	0c	1-Sep-17	The market already priced out most of the expectations for policy normalization. Subdued realized volatility and supply/demand imbalance skewed towards selling will prevent implied volatility from rising significantly	A drop in rates and/or a surge in implied volatility driven by more dovish ECB than what the market currently expects or by resurgence in geopolitical tensions

AUD: Receive AUD 5y5y vs. USD	82bp	1-Sep-17	Intermediate AU rates have broken out of the range vs. US rates, given strong global and domestic data. The curve should flatten if this dynamic continues, in our view. A positive xBMI signal lends further conviction to tactically fading the move wider.	Positive Australia data and/or the opposite for USD data (in particular US inflation), or a continued outsized widening of AUD FRA/OIS vs. USD.
AUD: Buy AUD 3m10y ATMF receiver vs. sell USD ATMF-1bp receiver for zero cost	0	1-Sep-17	Intermediate AU rates have broken out of the range vs. US rates, given strong global and domestic data. The curve should flatten if this dynamic continues, in our view. A positive xBMI signal lends further conviction to tactically fading the move wider.	Similar to the 5y5y cross-market trade above, with negative P&L if the US rates expires further south vs. the strike than the AUD receiver, in which case losses are theoretically unlimited.
NZD: Receive NZD 5y5y	3.72	11-Aug-17	Upcoming elections, governor change at the RBNZ and the relatively low neutral rate estimates favour long-end received positions. Attractive RV and a moderately bullish BMI signal look tactically favourable.	Risks include a reversal of the recent risk-off move across macro markets, a clear National party win in the election and a stronger than expected 3Q inflation print.
USD: Buy 5.1x 5y1y Receiver ATMF vs sell 1x 5y5y receiver ATMF	31bp	4-Aug-17	The vol on 5y1y is almost the same as that on 5y5y despite 5y1y having higher realized vol. The trade is long vega without much theta decay.	The risk is a continued drop in vol, which would incentivize selling the 5y1y point given the steep expiry curve for 1y tails
USD: Buy 5y10y ATMF / ATMF-100 receiver spread in 2x notional vs sell a 5y30y ATMF / ATMF -50 receiver spread in 1x notional	205c	14-Jul-17	Longer NC periods on callable issuance will pressure 5y30y vol more than 5y10y, and the trade is long vol at a historically low entry point.	A further drop in vol would lead to losses on the trade. A sell-off in rates would lead to delta losses, so we suggest delta hedging the trade at initiation.
USD: Sell the ATMF stike in a ATMF/ATMF-75/ATMF-125 5y10y receiver fly in 1x/2.45/1x notional	0c	14-Jul-17	The entry point is close to multi-year lows and the trade gets longer vega as rates rally, which is likely to benefit from dealers dVega/dHedging	A drop in vol is the main risk to the trade.
USD: Buy 9x 6m2s10s cap and 4.6x 6m2y payer vs sell 1x 6m10y payer all struck ATMF	40bp mid	7-Jul-17	Historically cheap entry point and limited downside make the trade a good way to position for decorrelation of 2y and 10y rates.	Premium would be lost if the 2s10s curve rolls to the forward or if rates move significantly without an associated steepening or flattening.
USD: Buy 1y7y receiver fly with strikes 2.5 / 2.0 / 1.6	88c	7-Jul-17	The breakeven range on the 7y rate is approximately 1.65% to 2.42%, which seems pretty wide relative to the realized moves over the past few years.	A large move in 7y rates in 1-year would lead to loss of part or all premium.
GBP: Jun18 Future Call Fly (99.625/99.75/99.875)	2c	16-Jun-17	We think current market pricing for the first hike is exaggerated given the softness of economic fundamentals in the UK and would like to take advantage of it	The risk of this trade is that BOE hike or cut rates, in which case we lose the premium
GBP: Jun18 Future Put Ladder (99.625/99.5/99.375)	-1.2c	16-Jun-17	We think current market pricing for the first hike is exaggerated given the softness of economic fundamentals in the UK and would like to take advantage of it but also profit in case of a hike in the next 12 months	The risk to trade is that BOE hikes more than 2 times in the next 12 months. The potential loss is unlimited
USD: Buy 1.475x ATMF 2y30y vs sell 1x 5y30y ATMF payers	0c	16-Jun-17	Extension of no-call periods on Formosa callables is likely to increase pressure on the 5y30y point, while owning 2y30y provides upside if vol is bid	If vol continues to drop, the 2y30y point is likely to suffer more than the 5y30y point given their historical correlation.
USD: Buy 1.4x 6m10s30s vs sell 1x 1y10s30s ATMF curve caps	0bp	9-Jun-17	The 6m/1y 10s30s vol ratio is at the lows, offering an attractive entry point	If the 10s30s curve steepens but becomes even steeper in forward space, the trade could lose money. Also, if 6m10s30s vol at expiry ends up very high, the trade could lose money.

USD: Buy 1y2y and midcurve 1y2y2y ATMF receivers and sell 1y4y ATMF receiver	3bp	2-Jun-17	As curve correlations approach 1, midcurve vols have cheapened to new lows. This trade presents an attractive risk/reward ratio if the 2s5s curve starts to realize volatility while rolling positively	A large shift in rates upwards or downwards would lead to loss of premium.
USD: Enter 5y swap spread widener	7.25bp	16-Jun-17	High floater issuance reduces downward pressure on belly swap spreads, and potential for deregulation is a tailwind for across the curve spreads.	A major risk event would lead to a widening of front-end spreads and the spread curve could flatten.
USD: Buy 6m30y ATMF USD payors vs 6m10y ATMF+2 payors	0c	24-Mar-17	Shift in focus towards fiscal policy and regulatory reform are likely to increase volatility in long tails more than shorter tails. Ultra-long issuance is a catalyst	Failure of de-regulation to materialize or the Fed turns dovish, which would reduce the demand on floaters.
EUR: Buy 5y10y ATMF EUR payor vs sell 5y2y ATMF payor at zero cost	0c	10-Mar-17	Attractive forward rate curve and implied volatility rolldown and good performance under gradual policy normalization scenario	The risk to the trade is that the ECB hikes rates before terminating its quantitative asset purchase programme, leading to a bear flattening of the curve
Buy $135mm 2y30y at 1927bp versus selling $100mm 5y30y ATM straddles for 2800bp in forward premium	198bp	13-Jan-17	Longer NC periods on callable issuance would pressure the long expiries	A drop in issuance or failure of reported FSC regulation on NC period minimums to materialize
Buy AUD 1y3y10y Forward vol	73nvol	12-Dec-16	Expiry curve on 10y tail is sharply downward sloping, providing attractive roll-up	Vol generally reprices lower and/or expiry curve continues to invert
Buy 1y2s10s curve cap	17bp	31-Mar-17	Implied correlation exceeds its historical relationship with the curve level, and focus on Fed's balance sheet and ultra-long bond issuance support steeper curves. Also, the trade rolls positively	If the Fed is priced to hike aggressively, then the 2s10s curve might flatten beyond what's implied by the forward and premium would be lost
Buy 3m1s10s curve caps against 3m2s5s caps and 3m10s30s floors	0c	7-Apr-17	Implied realized ratio on 1s10s is favourable compared to the other legs of the trade and the focus on the Fed's balance sheet and ultra-long issuance is likely to steepen the yield curve.	If the market starts pricing in more than 2 hikes in 2018, the 2s5s curve could steepen considerably and the trade would lose money if 1s10s does not steepen as much.
Buy 1y10y vs 1y2y ATMF vega weighted straddles	1.25 vol ratio	28-Apr-17	Steeper yield curves are likely to lead to outperformance of vol on longer tails.	Aggressive hiking by the Fed would lead to higher realized volatility in the front end, which is supportive of 1y2y vol
Buy 5y30y Receiver spread ATMF vs ATMF-75bp Receiver	548bp	19-May-17	The rally removed vega from dealers' books, which supports a long vega position	A significant improvement in economic conditions or issuance of ultra-long bonds could lead to a sell-off in 30y rates and loss of premium on the trade.
Buy 1y1y2y straddle ATMF vs Sell 2y2y straddle ATMF	0c	28-Jul-17	The 1y midcurve vol is trading below 2y vanilla vol and implying a correlation close to 1. The structure is 0 cost and long gamma, while having a superior decay profile to outright gamma trades.	Short-dated vols continue to drop from gamma selling.
Buy JL160 ASW vs 3m libor	2bp	10-Jun-17	Attractive positive carry rolldown and good support from Japanese banks in 20y JGB	JGB purchase reduction in long end, Banks' loss-cutting of 20y JGBs in any big sell-off

Exhibit 74: History of Euro HICPxT 5y swap breakevens

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG	Gross P&L BP	Gross P&L US$K
Euro HICPxT 5y swap breakevens	5 year	Long Euro HICPxT 5y breakevens	2-Dec-16	0.0111	27-Jan-17	0.0137				EUSWIT5 Curncy		
Euro HICPxT 5y swap breakevens	5 year	Long 5y short 5y5y HICPxT breakeven curve flattener	27-Jan-17	1.37	3-Mar-17	1.2625				EUSWIT5 Curncy		
EUR Inflation Swap Forward 5Y5Y	5 year	Short 5Y5Y HICPxT (Was: Long 5y short 5y5y HICPxT breakeven curve flattener prior to 3-March)	27-Jan-17	0.017	7-Apr-17	0.0161				FWISEU55 Index		

Source: Morgan Stanley Research

Exhibit 75: History of recommendations for Euro HICPxT 10y swap breakevens

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG	Gross P&L BP	Gross P&L US$K
Euro HICPxT 5y swap breakevens	5Y	Long 10y on 5s10s15s HICPxT fly	28-Apr-17	1.175	04-Aug-17	1.31				EUSWI5 Curncy		
Euro HICPxT 10y swap breakevens	10Y	Long 10y on 5s10s15s HICPxT fly	28-Apr-17	1.4	04-Aug-17	1.45				EUSWI10 Curncy		
Euro HICPxT 15y swap breakevens	15Y	Long 10y on 5s10s15s HICPxT fly	28-Apr-17	1.617	04-Aug-17	1.63				EUSWI15 Curncy		

Source: Morgan Stanley Research

Exhibit 76: History of recommendations for BTP 5s30s steepener

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG	Gross P&L BP	Gross P&L US$K
BTPS 2.700 03/01/2047	1-Mar-47	Short BTP47s on BTP 27s47s67s fly at 43bp	07-Oct-16	2.47%	27-Jan-17	2.34%				IT0005162828		
BTPS 6.500 11/01/2027	11-Jan-27	Short BTP47s on BTP 27s47s67s fly at 43bp	07-Oct-16	1.52%	27-Jan-17	3.30%				IT0001174611		
BTPS 2.800 03/01/2067	1-Mar-67	Short BTP47s on BTP 27s47s67s fly at 43bp	07-Oct-16	2.93%	27-Jan-17	3.55%				IT0005217390		
BTPS 2.700 03/01/2047	1-Mar-47	Long BTP Mar-47 vs BTP Jun-27 100:75 weighted	23-Jun-17	3.03%	01-Sep-17	3.23%			100	IT0005162828		
BTPS 2.200 06/01/2027	1-Jun-27	Long BTP Mar-47 vs BTP Jun-27 100:75 weighted	23-Jun-17	1.90%	01-Sep-17	2.07%			75	IT0005240830		
BTPS 1.200 04/01/2022	1-Apr-22	Long 5y BTP vs OAT	02-Jun-17	0.92%	01-Sep-17	0.72%				IT0005244782		
FRTR 0.000 05/25/2022	25-May-22	Long 5y BTP vs OAT	02-Jun-17	-0.21%	01-Sep-17	-0.21%				FR0013219177		

Source: Morgan Stanley Research

Exhibit 77: History of recommendations for Mar-18 short sterling future (L H8)

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG	Gross P&L BP	Gross P&L US$K
Mar-18 short sterling future (L H8)	1-Mar-18	Long Mar-18 short sterling	24-Mar-17	99.45	21-Apr-17	99.58				L H8 Comdty		

Source: Morgan Stanley Research

Definitions:

Buy/Long: The analyst expects the total or excess return (depending on the nature of the recommendation) of the instrument or issuer that is the subject of the investment recommendation to be positive over the relevant time period.

Sell/Short: The analyst expects the total or excess return (depending on the nature of the recommendation) of the instrument or issuer that is the subject of the investment recommendation to be negative over the relevant time period.

Selling Protection or Buying Risk: The analyst expects that the price of protection against the event occurring will decrease over the relevant time period.

Buying Protection or Selling Risk: The analyst expects the price of protection against the event occurring will increase over the relevant time period.

Pay: The analyst expects that over the specified time period the variable rate underlying the swap agreement that is the subject of the investment recommendation will increase.

Receive: The analyst expects that over the specified time period the variable rate underlying the swap agreement that is the subject of the investment recommendation will decrease.

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Event Calendar

Exhibit 78: Risk event calendar

Date (GMT)	Time (GMT)	Date (ET)	Time (ET)	Ccy	Event	Ref. Period
25-Sep	06:00	25-Sep	01:00	JPY	Leading Index CI	Jul F
	06:00		01:00	JPY	Coincident Index	Jul F
	06:35		01:35	JPY	BoJ's Kuroda spks (Business Leaders Meeting)	
	08:00		N/A	GBP	Brexit Talks with EU (Fourth Round)	
	08:45		03:00	EUR	ECB's Constancio spks (ECB Research Conference)	
	09:00		03:45	JPY	BoJ's Kuroda spks (Press Conference)	
	09:00		04:00	EUR	IFO Business Climate	Sep
	09:00		04:00	EUR	IFO Expectations	Sep
	13:30		04:00	EUR	IFO Current Assessment	Sep
	13:30		08:30	USD	Fed's Dudley (voter) spks (Workforce Development)	
	14:00		08:30	USD	Chicago Fed Natural Activity Index	Aug
	14:00		09:00	CNY	Conference Board China Leading Economic Index	Aug
	15:30		09:00	EUR	ECB's Draghi spks (Monetary Development)	
	15:45		10:30	USD	Dallas Fed Manufacturing Activity	Sep
	17:40		10:45	EUR	ECB's Coeure spks (Monetary Policy)	
	22:15		12:40	USD	Fed's Evans (voter) spks (Monetary Policy)	
	22:45		17:15	AUD	RBA's Bullock spks (Where To From Here?)	
	23:30		17:45	NZD	Trade Balance	Aug
	N/A		18:30	USD	Fed's Kashkari (voter) spks (Townhall)	
26-Sep	00:30		19:30	AUD	Consumer Confidence	
	00:50		19:50	JPY	BoJ Minutes	Jul-20
	01:00		20:00	NZD	ANZ Business Confidence	Sep
	07:45	26-Sep	02:45	EUR	French Business Confidence	Sep
	07:45		02:45	EUR	French Manufacturing Confidence	Sep
	14:00		N/A	GBP	UK's PM May, EU's Tusk Meet (Brexit Discussion)	
	14:30		09:00	USD	Case-Shiller Home Price Index (QoQ)	Jul
	15:00		09:30	USD	Fed's Mester (non-voter) spks (Global Outlook)	
	15:00		10:00	USD	New Home Sales	Aug
	15:00		10:00	USD	New Home Sales (MoM)	Aug
	15:00		10:00	USD	Consumer Confidence Index	Sep
	17:00		10:00	USD	Richmond Fed Manufacturing Index	Sep
	17:30		12:00	USD	Fed's Yellen (voter) spks (NABE Conference)	
	N/A		12:30	USD	Fed's Bostic (non-voter) spks (Monetary Policy)	
27-Sep	07:00	27-Sep	N/A	NZD	RBNZ's Spencer Assumes Acting Governor Role	
	07:45		02:00	JPY	Machine Tool Orders (YoY)	Aug F
	09:00		02:45	EUR	French Consumer Confidence	Sep
	09:00		04:00	EUR	M3 (YoY)	Aug
	09:00		04:00	EUR	Italian Business Confidence	Sep
	10:00		04:00	EUR	Italian Consumer Confidence Index	Sep
	11:00		05:00	EUR	Italian Industrial Orders (MoM)	Jul
	13:30		06:00	GBP	CBI Reported Sales	Sep

	13:30		08:30	USD	Durable Goods Orders	Aug P
	15:00		08:30	USD	Durables Ex Transportation	Aug P
	15:30		10:00	USD	Pending Home Sales (MoM)	Aug
	16:45		10:30	USD	EIA Crude Oil Inventories	
	17:55		11:45	CAD	BoC's Poloz spks (St John's Board of Trade)	
	18:30		12:55	CAD	BoC's Poloz spks (St John's Board of Trade Press Conference)	
	21:00		13:30	USD	Fed's Bullard (non-voter) spks (Monetary Policy)	
	N/A		16:00	NZD	RBNZ Rates Decision	
28-Sep	00:00		19:00	USD	Fed's Rosengren (non-voter) spks (Money Marketeers)	
	00:50		19:50	JPY	Japan MoF Weekly Security Flow	
	07:00	28-Sep	02:00	EUR	German GfK Consumer Confidence	Oct
	08:00		N/A	AUD	RBA's Debelle spks (BoE Conference)	

Source: Morgan Stanley Research, Bloomberg

Ratings

Exhibit 79: Sovereign Bond Ratings

		Aaa/ AAA	Aa1/ AA+	Aa2/ AA	Aa3/ AA-	A1/ A+	A2/ A	A3/ A-	Baa1/ BBB+	Baa2/ BBB	Baa3/ BBB-	Ba1/ BB+	Ba2/ BB	Ba3/ BB-	B1/ B+	B2/ B	B3/ B-	Below B3/ B-
US	Moody	STA																
	S&P		STA															
	Fitch	STA																
JPN	Moody					STA												
	S&P					STA												
	Fitch						STA											
UK	Moody		NEG															
	S&P			NEG														
	Fitch			NEG														
GER	Moody	STA																
	S&P	STA																
	Fitch	STA																
FRA	Moody			STA														
	S&P			STA														
	Fitch			STA														
AUT	Moody		STA															
	S&P		STA															
	Fitch		STA															
NETH	Moody	STA																
	S&P	STA																
	Fitch	STA																
FIN	Moody		STA															
	S&P		STA															
	Fitch		STA															
BEL	Moody				STA													
	S&P			STA														
	Fitch				STA													
SPA	Moody									STA								
	S&P								STA									
	Fitch								POS									
ITA	Moody									NEG								
	S&P										STA							
	Fitch									STA								
IRE	Moody						STA											
	S&P					STA												
	Fitch						STA											
POR	Moody											POS						
	S&P										STA							
	Fitch											STA						
GRE	Moody																	POS
	S&P																STA	
	Fitch																	POS

Source: Morgan Stanley Research, Moody's, Standard and Poor, Fitch
STA: Outlook Stable, NEG: Outlook Negative, DEV: Outlook Developing, OW-: On Watch Negative, POS: Outlook Positive, SD: Selective Default

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Equal-weight/Hold	**1425**	**44%**	**349**	**46%**	**24%**	**701**	**46%**
Not-Rated/Hold	**61**	**2%**	**6**	**1%**	**10%**	**10**	**1%**
Underweight/Sell	**606**	**19%**	**91**	**12%**	**15%**	**242**	**16%**
TOTAL	**3,256**		**752**			**1508**	

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